

EXPLORING SACIA MEMBERS' PERCEPTIONS OF DIGITAL
TRANSFORMATION AND SUSTAINABILITY IN THE SOUTH AFRICAN SPORT
EVENTS SUBSECTOR POST COVID-19

By

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submitted in accordance with the requirements for
the degree of

MASTER OF COMMERCE

in the subject

BUSINESS MANAGEMENT

at the

UNIVERSITY OF SOUTH AFRICA

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(July 2025)

ABSTRACT

The COVID-19 pandemic exposed critical vulnerabilities in the sustainability and resilience of the South African sport events subsector, predominantly through widespread event cancellations and severe financial losses. These disruptions have accelerated the need for sustainable solutions, particularly through the use of technology. Guided by Christensen's Disruptive Innovation Theory, the study aims to assess the role of disruptive innovations such as virtual and augmented realities (VR/AR) and artificial intelligence (AI) in enhancing the sustainability and resilience of sport events. The study explores the perceptions of the digital transformation of the sport events subsector, through the lens of Southern African Communications Industry Association (SACIA) members, one of the largest associations in the South African events sector. Qualitative research was conducted using online focus groups to gather nuanced inputs from members. Findings reveal that while digital transformation is widely acknowledged as a valuable tool for adaptation and engagement, there are concerns regarding access, unemployment, technological readiness and the preservation of in-person event experiences. The study offers practical insights for policymakers, event organisers and stakeholders, emphasising the need for a balanced, inclusive and innovative approach to digital integration in sport events for the sustainable growth and resilience of the subsector.

Key terms: Artificial intelligence, augmented reality, COVID-19, disruptive technologies, innovation, SACIA, sport events, sustainability, virtual reality

DECLARATION

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EXPLORING SACIA MEMBERS' PERCEPTIONS OF DIGITAL TRANSFORMATION AND SUSTAINABILITY IN THE SOUTH AFRICAN SPORTS EVENTS SUBSECTOR POST COVID-19

I declare that the above dissertation is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other higher education institution.


SIGNATURE

19/02/2026
DATE

ACKNOWLEDGEMENTS

I would like to express my sincere appreciation to all those who have supported and guided me throughout the course of this research.

To my academic supervisors, Mr. Michael du Toit and Dr. Zwanga Mposi, your wisdom and insights were instrumental in shaping this work. I deeply appreciate your time and expertise.

Dr. Cornelius Bothma for guiding me through the proposal stage. Your direction was key in setting the foundation for this research.

Kevan Jones and the members of SACIA for generously sharing your time and expertise. Your contributions enriched this research and helped bring it to life.

To my loving husband, Jerome Raghunandan, words cannot express my appreciation for your unending patience and understanding throughout my academic journey. You have been my constant source of strength.

DEDICATION

This dissertation is dedicated to my father, Late Mr. B Ramsaroop, who taught me that the greatest wealth you can give your children is education. Your legacy continues to inspire me every day.

_ “I can do all things through Christ who gives me strength.” (Philippians 4:13) _

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LIST OF ABBREVIATIONS

AI	Artificial Intelligence
AR	Augmented Reality
GDP	Gross Domestic Product
FIFA	Federation of International Football Association
MERS	Middle East Respiratory Syndrome
MICE	Meetings, Incentives, Conferences and Exhibitions
NASA	National Aeronautics and Space Administration
ProAV	Professional Audiovisual
TPSA	Technical Production and Services Association
VR	Virtual Reality
SACIA	Southern African Communications Industry Association
SADC	South African Developing Communities
SARS	Severe Acute Respiratory Syndrome

CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

The COVID-19 pandemic caused significant disruption and exposed vulnerabilities across various industries as restrictions on movement, travel and large events brought many operations to a standstill (Nauright, Zipp & Kim, 2020: 1703; SA Coronavirus, 2020). Businesses sought to seek new and innovative ways to remain sustainable in the post-pandemic world (Barua & Bardhan, 2021: 60). In this context, sustainability is increasingly understood not only as long-term economic survival, but also as the ability of organisations to adapt, remain resilient and continue delivering value under conditions of uncertainty and disruption (Dowling, 2020: 6). Within academic discourse, the expanded understanding of sustainability has prompted scholars to reconsider how industries respond to disruptions and the ways in which long-term viability may be achieved (Mallen & Chard, 2021: 103). The events sector, the focus of this study, was similarly affected by the pandemic, as most other businesses were (Roux, 2022: 1535). Given the definition of an event, by Müller (2018: 16), as a “public gathering of a populace at a determined time and place for a purpose”, it is likely that this sector was more affected than others due to the required social distancing during the pandemic.

Eason-Bassett and Reic (2020: 2) argue that the restrictions on gatherings imposed by government authorities to prevent the spread of the coronavirus, had direct implications for the events sector, more so for the sport events subsector. The sport events subsector in South Africa reported an estimated revenue loss of R12 billion (\$700 million) in 2020 alone due to event cancellations, reduced sponsorships and halted ticket sales (Khumalo & Dlamini, 2021: 1). This financial strain led to widespread job losses and diminished community engagement and economic activity in host cities (SA Tourism, 2022: 14). Beyond economic and social consequences, the pandemic has also generated renewed academic interest in understanding how sport event systems respond to disruption and uncertainty (Dowling et al., 2022: 2). Following the unprecedented impact of the pandemic, various business associations, including SACIA, were called upon to assist in finding solutions for members, who

were restricted from moving and gathering in the workplace (Coles et al., 2022: 3). Recognised as one of Southern Africa's largest industry bodies in the communications and events sector (Who Owns Whom, 2020: 156), SACIA played a critical role in addressing challenges during lockdowns, particularly for member groups such as sport event organisers.

Westmattmann, Grotenhermen and Schewe (2021: 119) identified the need for alternative means for members involved in the sport events subsector to connect with their audiences. Many of the solutions that event organisers resorted to during this time were technology orientated (Paul, 2023: 189). These technology-oriented responses align with the broader understandings of digital transformation, which refers to the strategic adoption and integration of digital technologies to fundamentally reshape organisational processes, value creation and stakeholder engagement (Verhoef et al., 2021: 890). From an academic standpoint, digital transformation has increasingly been examined as a complex organisational phenomenon, requiring attention not only to technological capability but also to human, cultural and contextual factors (Vial, 2021: 14). The question then arises as to the nature of these solutions, and the perceptions surrounding these alternative technologies as a means of future sustainability for the subsector. Understanding stakeholder perceptions is important, as perceptions shape attitudes toward technology adoption, influence decision-making and determine the extent to which digital transformation initiatives are accepted or resisted within organisations (Guest, Namey & Mitchell, 2023: 41). Despite growing scholarly interest in digital transformation and sustainability, limited research has examined these concepts through the perceptions of sport event stakeholders, particularly within the South African context, thereby presenting a clear academic gap that this study seeks to address.

Chapter One provides the context of the research by introducing SACIA as a key association in promoting the sport events subsector in Southern Africa. The discussion opens with an overview of the South African sport events subsector, the challenges facing the subsector and an exploration of the trends that took place in the rest of the world, specifically, the incorporation of various digital technologies as a proposed means of sustainability for the industry that the South African sport events subsector may adopt.

1.2 BACKGROUND

In this section, information on the sport events subsector is provided, as well as information on SACIA, one of the key associations involved in the sport events subsector in South Africa.

1.2.1 The sport events subsector in South Africa

As the sport events subsector is part of the broader events sector in South Africa, this discussion begins by focusing on the events sector as a whole and then focuses on the sport events subsector.

According to a survey conducted by the Sun Circle Group (2019), the events sector makes up a very large and important business sector and provides several economic and non-economic benefits to the country (Steriopoulos & Wrathall, 2021: 78). Who Owns Whom (2020: 114) reported a total contribution of the events sector to the national Gross Domestic Product (GDP) of R115 billion pre-COVID-19 and a compound annual growth rate of 13.48 (Verified Market Research, 2021). Economic benefits as outlined by Maennig (2017: 14) include increased tourism and job creation while non-economic benefits refer to social integration and entertainment. South Africa hosts more than a thousand sport events annually, including the Two-Oceans Marathon, the Comrades Marathon, the Midmar Swimming Mile, the Premier Soccer League, numerous rugby and cricket events, as well as many other sporting local and international sporting events (Fourie & Spronk, 2011: 75).

The global events sector declined to 20% of the original size, between 2020 and 2022 (Rogers & Wynn-Moylan, 2022: 2). Similarly, the South African events sector was reported to have contracted between 60 and 80% (Belot, 2020: 7). According to Statista.com (2022) the South African events sector comprises three major categories of events, namely: cinematic events, music events and sport events, with sport events accounting for 40% of the market. However, SACIA classifies events differently, identifying entertainment events, business events and sport events as the three main categories. The decline in the events sector significantly affected all event categories, with sport events experiencing substantial disruptions in attendance, revenue and

operations. Since several mass sport events were cancelled during the pandemic because they posed a serious threat to the public health sector (Faganel, Rižnar & Baruca, 2021: 85), Nauright et al. (2020: 1703) recognise that the cancellation of sport events resulted in significant financial losses and economic difficulties for sport events stakeholders such as sector owners, producers, athletes, trainers and sport employees. Demir & Cetin (2022: 10) agree that COVID-19 has thus created complexity and uncertainty for industries, especially in sport and entertainment events. The question then arises as to the future sustainability of the sport events subsector following the instability and threat induced by the lockdown (Goh, 2021: 1). Nauright et al. (2020: 1703) suggest that the challenges, disruptions and cancellation of numerous sport events could give rise to “new sport forms” and ways of thinking about sport, predicting an impending evolution of the sport events subsector.

1.2.2 The Southern African Communications Industry Association (SACIA)

SACIA, as described by SACIA.org (2022), is a non-profit organisation that was specifically designed to promote the adoption of professional standards and ethical business practice in the communications, events and the entertainment sector throughout Southern Africa. The value proposition of SACIA includes the following:

- Promoting the professionalism of the event sector through the education, training, and development of members.
- Presenting industry specific training programs, conferences, and workshops.
- Building relationships with, and between learning centres, broadcasters, communication professionals, and audio/visual professionals throughout the Southern African Developing Communities (SADC) region; and
- Advocating for diversity and transformation that reflects the population demographics of South Africa (SACIA, 2023).

Serving and representing various disciplines and special interest groups within the events sector such as broadcasting, technical production, events safety, content creation, education students and event professionals in Southern Africa (Who Owns Whom, 2020: 130), SACIA is led by a member-appointed board of directors and an executive director tasked with providing strategic leadership to the organisation (SACIA, 2023). The members are involved in doing work across the three major

categories of events, namely: entertainment events, business events and sport events (dac.gov, 2015).

SACIA membership is open to any individual or organisations involved in the communications industry within Africa. Corporate and institutional members include manufacturers, dealers, distributors, universities, corporations, government departments, television stations, radio stations, news agencies, satellite operators and production houses (SACIA, 2023). Individual membership is also available to those who work in these industries. As iterated by Jacobs (2016: 15), membership or affiliation to an industry recognised group is arguably the core of most business associations. Berkowitz and Bor (2018: 204) highlight that the instinctive desire by members to belong have long been leveraged by associations. Belonging to an association provides members with a sense of community (Abson, 2020: 18). In addition to their pool of services, associations offer programmes for professional development and advocacy to their members (Janosik, 2023: 194).

1.3 PRELIMINARY LITERATURE REVIEW

This section explores the existing literature and previous studies related to the topic.

1.3.1 What is a sport event?

A sport event is defined as an athletic activity requiring skill or physical prowess, usually competitive in nature and governed by a set of rules provided by a nationally recognised sanctioning body (Lawinsider.com, 2022). In addition, the Economic Development Authority (2017) describes it as typically including the ranking of competitors by order of finish, depending on the respective performance displayed by competitors within the rules provided for that activity. According to Demir and Cetin (2022: 3) the size and scale of sport events may vary, from mega sport events such as the FIFA World Cup and the World Olympics which attracts a global audience, to small-scale localised events where the participants may outnumber the spectators.

1.3.2 Sustainability and digital transformation in the context of sport events

For the purpose of this study, sustainability within the sport events subsector is understood as a multidimensional concept encompassing economic continuity and operational resilience, particularly in the face of disruptions such as the COVID-19 pandemic. Recent sport management literature emphasises that sustainable sport events are those that are able to adapt business models, protect employment, maintain stakeholder engagement and ensure long-term viability, rather than focusing solely on environmental outcomes (Mallen & Chard, 2021: 104; Dowling et al., 2022:3).

Digital transformation, in this context, refers to the strategic integration of digital technologies into event planning, delivery, and stakeholder interaction, resulting in fundamental changes to how sport events create value and engage with audiences (Verhoef et al., 2021: 890). In the sport events subsector, digital transformation has been associated with technologies such as virtual and augmented reality, live streaming platforms, data-driven fan engagement tools and hybrid event models, which gained prominence during and after the pandemic (Steriopoulos & Wrathall, 2021: 1; Russo, 2023: 93).

Importantly, the successful contribution of digital transformation to sustainability is largely influenced by stakeholder perceptions, as perceptions shape attitudes toward technology adoption, readiness for change and acceptance of digitally mediated event experiences (Guest, Namey & Mitchell, 2023: 41). Understanding how digital transformation is perceived by SACIA members is therefore essential in assessing its potential as a sustainable solution for the sport events subsector, a gap which this study seeks to address. Sustainability and digital transformation are explored in greater depth in Chapter Two and Chapter Three of this dissertation, where their definitions, dimensions and relevance to the sport events subsector are examined in detail.

1.3.3 Possible technological interventions to mitigate the challenges facing the sport events subsector as a result of the COVID-19 pandemic

Woyo and Nyamandi (2021: 1) argue that digital technology emerged as a vital resource in facilitating remote working, online learning and entertainment throughout the pandemic and thus has a critical role to play in resolving the future sustainability issues surrounding the sport events subsector. The authors analysed a virtual Comrades Marathon which took place in South Africa on 14 June 2020 and found that virtual events are much easier to operate during the lockdowns. Yung et al. (2021: 1505) agrees that there is a growing importance for innovative use of technology in a post COVID-19 world, to engage visitors through web-mediated virtual platforms, providing realistic experiences, generating interest and evoking positive emotions toward attractions and events.

Virtual reality (VR), which is a possible technological intervention, is a technology that integrates several other technologies to enable people to experience a world beyond reality (Oxford Languages, 2022: 950). SA Rugby has partnered with Dell Technologies to introduce an immersive VR experience to fans at all international games played in South Africa until 24 September 2022 (News24, 2022). SA Rugby (2022) considers digital transformation as one of the key focus areas for the future and are believe that the VR experience will allow for a closer engagement with fans through customised experiences, broadening the reach of content and involving sponsors more authentically (News24, 2022). According to ESPN Africa (2024), the boxing match between Jake Paul and Mike Tyson that took place on 15 November 2024, represented the first instance in which a streaming platform broadcasted a live boxing event which spectators across the world could view. According to Dell Technologies (2022), the incorporation of virtual reality in sport events helps create a unique 3-dimensional experience for the user from the location of their choice and it is a technology that is expected to be widely used in the future of sport events.

Daniels and Tichaawa (2021: 1) agree that the key to reshaping and transforming the sport events subsector lies in VR technology and believe that using VR technology can help create much-needed resilience in the sport events subsector. Although the

literature suggests a growing interest in the application of technologies in the sport events subsector, previous studies have not explored member's perceptions of the digital transformation of the sport events subsector as a means of sustainability.

While Chutipongdech and Kampitak (2022: 2) argue that hybrid events are essential for sustainability and will be a part of the “new normal”, Steriopoulos and Wrathall (2021: 1) point out that event cancellations have had a negative impact on the capacity of event organisers to plan for a sustainable future, and highlight the importance of exploring sport events managerial views and perspectives on the opportunities that have arisen because of the pandemic as well as the key skills and attributes that are required to move the subsector forward. The authors consider the human need for connectivity as the driving force behind adopting innovative practices to remain connected.

1.3.4 Brief summary of existing literature

Lee et al. (2021: 1) mentions the rapid growth in online demand and the transformation of various sectors such as education and retail but does not directly address the sport events subsector, highlighting a gap in the research. Similarly, Estanyol et al. (2023:1) noted that although the pandemic accelerated the virtualisation of sport events, many Spanish sport federations believe that face-to-face sport competitions are still not fully reproducible in a virtual format. This finding indicates a need for further research into improving digital technology applied to sport, within the South African context, to enhance interactivity and engagement. Russo (2023: 93) analysed the case of the Tokyo 2020 Olympic Games, which were significantly impacted by the COVID-19 pandemic and discussed how the pandemic accelerated the need for “advancement of digital transformation in sport” as a future trend. Hussain (2021: 182) focuses on the digital transformation and technological convergence in various sectors, including cultural heritage, in response to pandemic but does not extensively cover the sport events subsector.

A review of the literature substantiates the need for the present study which aims to bridge the research gap in existing literature and provide insight into the perceptions of sport event stakeholders through the members of SACIA on the digitisation of the

subsector as a means of sustainability for the sport events subsector. Prior research conducted by scholars Svensson and Radmann (2023: 594), Daniels and Tichaawa (2023: 99) and Prudky (2024: 1) has not fully explored whether sport event organisers are prepared to maintain the level of transformation that is required to go digital or revert to the traditional ways of conducting events. There is limited knowledge available of event stakeholders' views on the transformation of the subsector and the priorities that need to be considered when adapting to the new reality.

Further studies are therefore necessary to predict the future of the sport event subsector in South Africa and address the state of sport events in the post pandemic period, which will play an essential role in the future sustainability of the sport events subsector.

1.4 GUIDING THEORIES FOR THE STUDY

Jaccard and Jacoby (2010: 6) defines a theory as the scientific explanation for, or the reasoning behind which a phenomenon, idea or event has occurred in the natural world, that brings together many facts and hypotheses. Existing theories serve as a roadmap for developing the arguments on which the proposed study is based. Taylor (2022: 2) defines an innovation as the process whereby ideas, methods or objects that are perceived to be “new” translating into practical value for the world. Below is a table representing several innovation theories that were considered to explain the current situation facing the sport events industry.

Table 1.1: Comparison of innovation theories

Theory	Definition	Example	Advantages	Disadvantages
Incremental Innovation	Involves growing and improving a company through a series of minor improvements to existing products, services, processes and tools (Coccia, 2017).	Coca Cola introduces new flavours such as 'Cherry Coke' to their product line (Govindarajan, 2018)	- Company remains relevant to the consumer over time - Allows for differentiation	Slow process, product may become obsolete

			• Low cost	
Adjacent Innovation	Leveraging something they already do well to develop a new product or service in a related market (Harvard Business Review, 2012)	Aerospace technology being used to invent memory foam, firefighting equipment, cochlear implants, Velcro and Teflon (Cyprusinno.com, 2020).	• New market penetration • Faster scalability (Harvard Business Review, 2012)	• Cost to maintain existing and new markets
Disruptive Innovation	Characterised by the presence of new technologies and provides insight for businesses that are looking to undergo digital transformation (Christensen, McDonald, Altman & Palmer 2018:1043).	The use of new technologies such as virtual reality and 3-dimensional experiences such as virtual tours and Netflix, (Shah,2022)	• Opportunities for business growth • Supports future sustainability (Harvard Business Review, 2018)	• New technology may be untested and unrefined
Radical innovation	combines the power of technology with a new business model (Brooke, 2016).	Invention of the personal computer, cloud technology and the internet (Lahti, Nenonen, Sutinen, Pope (2021:163).	• Creates new product categories	• Initial market no longer exists • Alters the relationships between consumers and suppliers

(Source: Author's compilation)

Incremental innovation is the step-by-step change of something that already exists, usually in the form of linear improvement (Liu, Cheng & Zhang, 2021: 173). These innovations allow a company to remain relevant to the consumer over time. An example of incremental innovation is when a company like Coca Cola introduces new

flavours to their product line (Cyprusinno, 2020). These low-cost improvements help further differentiate a company from the competition while building on current offerings.

The adjacent innovation model involves a strategy where a business leverages something they already do well to develop a new product or service in a related market (Harvard Business Review, 2012). The premise of the adjacent innovation model is centred around drawing on existing capabilities. Examples of adjacent innovation in modern times are the National Aeronautics and Space Administration's (NASA) breakthroughs for the United States space programme which also evolved into ideas for the invention of memory foam, firefighting equipment, cochlear implants, Velcro, Teflon (Cyprusinno, 2020).

Radical innovation is a type of innovation that combines the power of technology with a new business model (Brooke, 2016: 1). It is a concept that changes the relationship between customers and suppliers by displacing current products and services or by making new product categories (Coccia, 2017: 1). Radical innovations according to Shah (2022: 1) include the invention of the personal computer, cloud technology and the internet (Lahti et al., (2021:163). While radical innovations are arguably disruptive in nature, disruptive innovation refers to an idea that improves an existing market by exceeding the needs of a customer base, eventually displacing the old market whereas radical innovation destroys the current market and value network and creates an entirely new one, as was the case with Netflix and the blockbuster video chain (Harvard Business Review, 2018).

The "Disruptive Innovation Theory" most appropriately reflects the current situation facing the sport events subsector and the impact that the presence of new technologies such as VR and AR has had on the industry. The Disruptive Innovation Theory, which was developed by Christensen (1997), suggests ways that new observations can be applied to industries and provides insights for businesses that are looking to undergo a digital transformation. Disruptive innovation and digital transformation represent opportunities to grow in new areas for businesses with the right capabilities (Christensen et al., 2018:1043). Disruptive technology such as VR and AR calls for a change in the way one looks at market failures and the impact these new technologies have had on the industry, and the ways in which technological

advancement can be used to enhance and sustain the sport event subsector (ID Tech Ex, 2020). This theory was used to guide the creation of a question guide and propose explanations for the findings of the study.

1.5 PROBLEM STATEMENT

The COVID-19 pandemic presented unforeseen challenges to the global events sector, especially the sport events subsector, necessitating a re-evaluation of traditional event formats and operational models (Dewi & Darma, 2024: 45). This situation, alongside the presence of disruptive technology such as VR, AR and AI increase the potential of digital transformation for long-term sustainability of the sport events subsector. Although previous studies have touched on the virtualisation of sport events in response to the lockdown restrictions, there is a lack of in-depth analysis on how digital transformation can serve as a strategic tool for long-term sustainability specifically within the South African sport events subsector.

The problem that this study aims to address is the limited insights into the adoption, impact and potential of digital transformation in enhancing the resilience and long-term sustainability of sport events in South Africa. The research question and objectives are directly linked to the problem statement.

1.6 RESEARCH QUESTION

Based on the above problem statement, the following research question can be posed:
What are the perceptions of SACIA members regarding the sustainability of the sport event subsector through digital transformation?

1.7 RESEARCH OBJECTIVES

The objectives of the proposed study are outlined below.

1.7.1 Primary research objective

The primary objective of this study is to explore the perceptions of SACIA members regarding how digital transformation can assist with the future sustainability of the sport events subsector.

1.7.2 Secondary research objectives

The secondary research objectives are as follows:

1.7.2.1 Secondary objective 1

To explore the nature of the challenges that SACIA members have experienced in the sport events subsector during the COVID-19 pandemic

1.7.2.2 Secondary objective 2

To explore the perceptions of SACIA's members as to the nature of the digital transformations that have taken place in the sport event subsector to bring sport events to supporters in the context of the COVID-19 pandemic.

1.7.2.3 Secondary objective 3

To explore the alternative technologies that the members of SACIA believe could be introduced to enhance the sustainability of their subsector post COVID-19.

1.7.2.4 Secondary objective 4

To explore the views of SACIA's members as to the association's past role and the future support that is required for the digital transformation of the subsector as a means of sustainability.

1.8 METHODOLOGY

Research methodology refers to systematic approach used to conduct research in a rigorous manner (Kumar & Praveenakumar, 2025: 1). Information on the sample,

sampling techniques, data instrument and data analysis method as well as the details of the chosen research design are briefly included in this section and are discussed in detail in Chapter Four.

1.8.1 Research design

Saunders, Lewis and Thornhill's research onion guided the stages of developing the appropriate research design for the study.

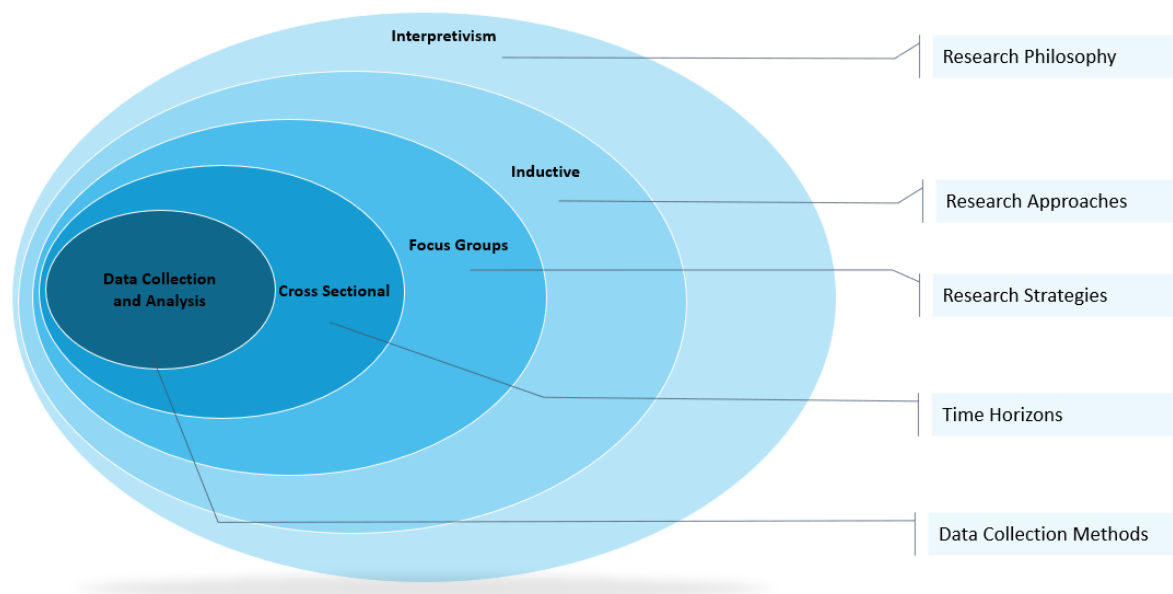


Figure 1.1: Saunders, Lewis and Thornhill's research onion

Adapted from Saunders, Lewis and Thornhill (2019: 2)

The five stages as outlined by the research onion are:

1.8.1.1 Research philosophy

A research philosophy may be interpretive, positivist, or realistic (Saunders, Lewis, & Thornhill, 2019: 2). The research philosophy employed in this study is interpretive, since positivism and realism involve proving or disproving a hypothesis and it is more suitable for quantitative studies with verifiable data (Ryan et al., 2020: 47). Interpretivism, in contrast to positivism, suggests that the implications of social phenomena are created by individual participants (Kelly, Dowling & Milar, 2018: 4).

Therefore, the key to an interpretivist approach lies in examining the differences in the respondents' understanding.

1.8.1.2 Research approach

The study is exploratory in nature and follows a qualitative research approach. According to Leedy and Omrod (2020: 9), qualitative research involves looking at characteristics, or qualities, that cannot be entirely reduced to numerical values. Qualitative research aims to examine the different variations and complexities of a particular phenomenon and is suitable in studies of complex human situations such as examining in-depth perspectives, behaviours, or values of a particular issue (Aspers & Corte, 2019: 3). A qualitative approach is grounded in inductive reasoning, allowing patterns and themes to emerge from the participant responses is therefore better suited to understand the current research problem.

1.8.1.3 Research strategy

The research strategy employed is online focus groups. Online focus groups are a form of guided group discussions that enable the researcher to gather information from a larger number of respondents over a short period of time (Bekwa et al., 2019:114). A pilot focus group of four SACIA members was conducted to test the research strategy, thereafter four focus groups, each consisting of 3-5 participants were conducted. Each focus group session lasted for a duration of 60 minutes. Focus groups sessions were recorded to facilitate the verification of responses. Online focus groups offer a safe and cost-effective method of conducting research despite geographic location (Lobe et al., 2020).

1.8.1.4 Time horizon

The time horizon refers to the time framework within which the research is intended for completion (Saunders, Lewis & Thornhill, 2007: 138). Two types of time horizons were considered, namely longitudinal (a study over time) and cross-sectional (a study at a point in time). A cross-sectional time horizon was used in the study as it aims to investigate the SACIA member's perceptions at a specific point in time.

1.8.1.5 Data collection methods

The Disruptive Innovation Theory together with the research objectives were used to design a question guide for the online focus groups. The researcher facilitated and encouraged open discussions among participants according to the question guide and study objectives. Online focus groups were chosen as a data collection method for its ability to generate insight on topics that were previously not understood and also helps the researcher understand the individual motivations of members while bringing the various viewpoints together in a way that individual interviews do not (Bekwa et al, 2019:114). The choice of online focus groups also assisted in reaching geographically dispersed audiences (Stewart & Shamdasani, 2017: 57).

1.8.1.6 Population

The target population are the members of SACIA. SACIA has over five hundred members participating in three special interest groups, namely: the broadcast industry group (BIG), the Professional Audio-Visual forum (ProAV) and the Technical Production Council of Southern Africa (TPSA), according to Who Owns Whom (2020: 120), from which the sample was drawn.

1.8.1.7 Sampling

A sample is a representative segment of a larger population (Bryman, 2012: 1). In qualitative research, much smaller samples tend to be used.

Purposive sampling, which is the intentional selection of informants based on their ability to elucidate a specific theme, concept, or phenomenon, was used (Palinkas, Mendon & Hamilton, 2023: 12). Purposive sampling, also known as judgmental, selective, or subjective sampling, is a form of non-probability sampling in which researchers rely on their own judgment when choosing members of the population to participate in their surveys. The reason for the chosen sampling technique is to ensure that participants are part of the target audience and members of SACIA and have the experience and the means to contribute meaningfully to the proposed study.

The main disadvantage of using non-probability sampling is that it is difficult to measure the representativeness of the sample, and the results cannot be extrapolated to the larger population (Iacobucci & Churchill, 2010: 285). However, due to the exploratory nature of this study, the purpose of the results is not to infer about a larger population but rather to better understand the perceptions of the target population.

1.8.1.8 Sample size

The sample size represents the number of respondents selected from the overall population that are used in the research. Although Boddy (2016: 1) recommends a sample size between 25 and 34 respondents in qualitative research, the study comprised a total of twenty participants as some participants did not respond on the day despite previously agreeing to participate. Crouch and McKenzie (2006: 1) note that using fewer than 20 participants may still be effective since qualitative studies can reach saturation at relatively small sample sizes. Each focus group ultimately comprised of three to five participants as well as a separate pilot group of four participants. Criteria for inclusion and exclusion of the sample were: having an active affiliation with the sport event industry and falling within the age range of 18 and 65 years old.

1.8.1.9 Data analysis

The data was analysed on ATLAS.ti, using inductive thematic analysis. The software offered a framework for systematically coding and evaluating the data and allowed the researcher to relate the findings to more comprehensive theoretical principles.

1.8.2 Trustworthiness

This refers to the believability of the research findings and is established in accordance with Lincoln and Guba's four- dimension criteria, viz. credibility, transferability, confirmability and dependability (Lincoln and Guba, 1985: 9; Bang, 2024: 70). This was achieved through prolonged engagement with the data and persistent observation.

1.8.3 Ethical considerations

Cooper and Schindler (2012: 26) highlight the importance of ethics in the quality of research. Therefore, procedural ethics have complied with the guidelines as prescribed by the University of South Africa.

Ethical clearance was obtained from the University of South Africa (UNISA) prior to the commencement of the study (Ethical Clearance Certificate No. 2311; see Appendix B). All participants were of legal age between 18-65 years of age. No participant was forced or coerced into participating or rendering unwilful information. Participants were required to complete a consent form prior to participating in the focus group (See Appendix C). Permission was granted by SACIA, in the form of a gatekeeper's permission letter (See Appendix A), before contacting members to participate in the research. All participants including the researcher arranged a predetermined time to conduct the focus group without external distractions present. All parties in the study were provided with a participant information sheet and were fully informed about the nature and process of the research. Any data derived from the study is stored under password protection on the personal computer of the researcher and was shared only with the supervisory team to prevent the misuse of personal information of the participants in adherence to the POPI Act. Participants' identities are anonymised in this dissertation, or any articles based on the dissertation, and the data will be destroyed after a period of five years. This guarantees the confidentiality of the participant while upholding the integrity of the research.

1.9 CONTRIBUTION TO KNOWLEDGE

The undertaking of this study contributes to the further understanding and knowledge of the various technologies that can be adopted in sport events and explores and articulates the perceptions of SACIA members of the role of digital transformation in the sport events subsector as a means of sustaining this sector over the longer term and in event of future disruptions. The findings of this study seek to provide feedback on the role of SACIA in supporting its members with the lockdown as well as providing guidance to SACIA leaders as to the nature of the support that members require to digitally transform the sport events subsector and, also highlight areas that require

improvement to enable the association to add greater value for its members. The success of the sport events subsector has created job stability for the many stakeholders involved in the subsector (Kim et al., 2017: 1). The findings of this study aim to provide further insight to sport event organisers, stakeholders and business associations and contribute to the limited literature available on digital/hybrid sport events in South Africa. Academic, practical and strategic recommendations will be provided in the final chapter of this dissertation.

1.10 STUDY LIMITATIONS

A few limitations have been noted during the study. Firstly, only members of SACIA were included in the sample; thus, the perceptions of stakeholders outside the association were not represented. In addition, the study focused primarily on sport events, thereby excluding the business and cultural event subsectors, whose digital transformation experiences and technological adoption may differ. Future research could therefore aim at identifying a more statistically representative sample of individuals and organisations involved in the sport events sector in South Africa, as well as extending the scope to other event subsectors. Secondly, since the study is exploratory in nature, future quantitative approaches could help to generalise the findings and broaden the industry-wide implications. Furthermore, some of the alternative technologies discussed in this research, such as hybrid event technologies and immersive fan engagement tools, require specialised skillsets which the South African sport events subsector may not yet have been fully exposed to. However, this shortcoming presents an opportunity for targeted training and capacity-building initiatives to develop the digital competencies of stakeholders within the sport events subsector.

1.11 CHAPTER OUTLINE

The following chapters are planned for the study.

Chapter One: Introduction and background of study

This chapter provides an overview of the study. The chapter contains an introduction, a background and context of the study, the problem statement, research question and

research objectives, as well as an overview of the research methodology to be used. The chapter will essentially be a synopsis of this research.

Chapter Two: SACIA and the context of the sport events subsector

This chapter discusses the role of SACIA as an association to lead the sport events sector towards the goal of sustainable digital transformation. An overview of the evolution of sport events leading towards a new model is discussed.

Chapter Three: The nature of digital transformation and innovation

Chapter Three outlines an in-depth literature review of the sport events subsector. Focus is placed on the digitalisation of the sector in support of its sustainability, with special attention on VR, AR and AI as technologies that are potentially disrupting the subsector.

Chapter Four: Research methodology

Greater detail and specifics of the research methodology that was used in the study is presented in this chapter.

Chapter Five: Discussion of findings

The findings of the study are presented and discussed.

Chapter Six: Conclusions and recommendations

In this chapter, conclusions are drawn from the findings and recommendations are proposed for SACIA and its members.

Figure 1.2 illustrates the orientation and the flow adopted in this research.

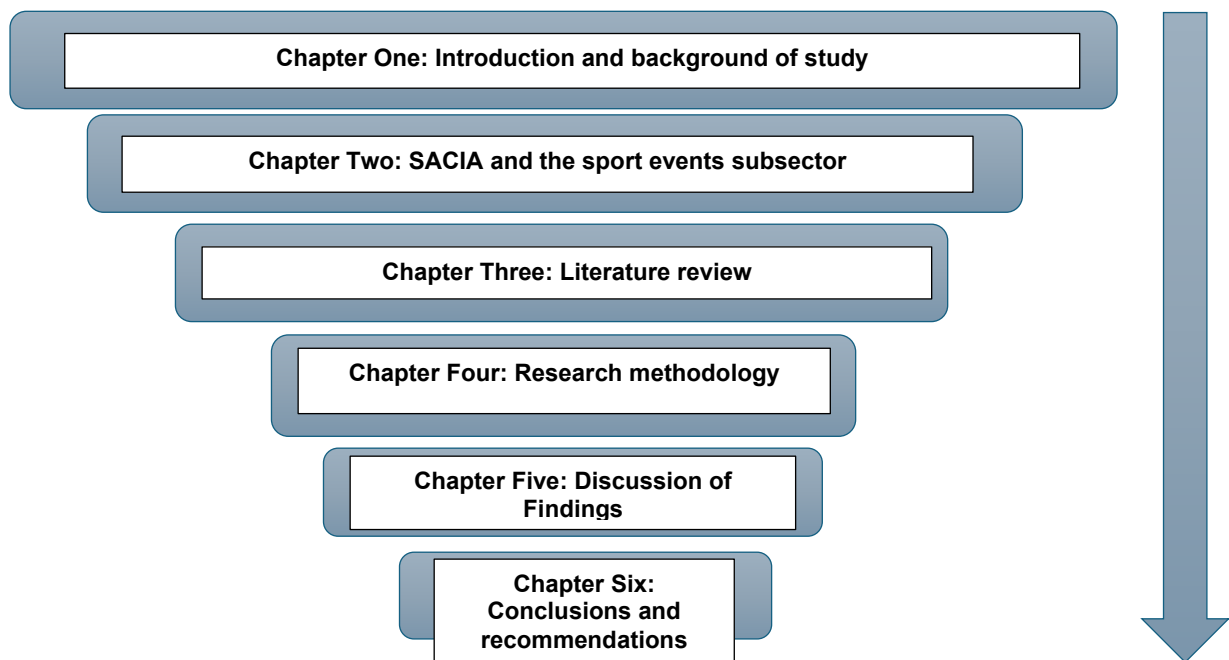


Figure 1.2: Orientation and flow of research

(Source: Author's compilation)

1.12 SUMMARY

Chapter One established the foundation of the study by introducing the central focus: an exploration of SACIA members' perceptions of the digital transformation of the sport events subsector as a means of ensuring its sustainability. The chapter contextualised the research within the challenges induced by the COVID-19 pandemic, which accelerated the need for digital innovation across various sectors, including sport. A brief overview of the research design and methodology was provided, outlining the qualitative approach used to gather insights from SACIA members.

CHAPTER TWO: SACIA AND THE CONTEXT OF THE SPORT EVENTS SUBSECTOR

2.1 INTRODUCTION

SACIA was introduced in Chapter One as a key association responsible for promoting the sport events subsector in Southern Africa. In this chapter, the role, functions and purpose of industry associations, specifically SACIA, is discussed. The context opens with an overview of the South African events sector, and is narrowed down to the sport events subsector, which is the primary focus of this study.

2.2 INDUSTRY ASSOCIATIONS

An industry association is an organisation that protects and defends the rights of businesses and employees within a certain sector (Cambridge dictionary, 2023: 600). According to Yao et al. (2022: 1), industry associations, which represent an important yet undervalued form of institutional intermediaries, are member-based organisations that represent the interests of a specific sector and work to influence government policy and regulation within that sector. Goods (2022: 2113) refers to industry associations as the “key agents” who negotiate on behalf of their members and play an integral role in highlighting pertinent business issues in a specific sector. Industry associations also possess the ability to shape sustainability practices within their respective sectors (Buchanan & Marques, 2018: 1). In summary, industry associations are organisations that represent and promote the collective interests of their members within a particular sector by advocating for their members, facilitating networking and collaboration and providing various services and resources to help their sector thrive.

For Jacobs (2016: 1), membership is at the core of most associations, which is primarily driven by a member’s “desire to belong”. How members interact with the association may differ relative to the mission and focus of the association. The original purpose of many industry associations is to provide membership but over time the members have realised that the power of a group could do more than merely affiliate, giving rise to the realm of professional development, certifications and advocacy

offered by industry associations today (Shen & Zhou, 2022: 2288). Professional bodies now offer a variety of services and benefits to members such as the cooperation and commitment to share knowledge and experience on what is necessary to build and maintain their industry (Jacobs, 2016: 27). Industry associations also contribute to the establishment of professional networks where members can foster relationships with other individuals, organisations or authorities. These organisations help to provide a sense of community and personal connection for members while promoting skills development and innovation through learning opportunities such as training, workshops and conferences (Hung & Hager, 2020: 971; Jacobs, 2016: 27). Belonging to an association offers members a sense of status, prominence and a political voice in industry-related matters. Industry associations serve to facilitate the social recognition of an occupational group both in the public and legal sectors (Bedini et al., 2022: 561; Hung & Hager, 2020: 972).

Due to the overwhelming speed of technological advancement, industry associations are continuously being challenged to provide better value for members (Delaney & D'Agostino, 2015: 3). Like many other organisations, industry associations are challenged by customer demographics, rapidly changing market segments, globalisation and disruptive technology (McKinsey, 2020: 1). As a result of these changes, membership is evolving and the ability to harness new market opportunities through disruption and innovation should inspire hope for industry associations (Jacobs, 2016: ix).

Although industry associations have long existed in both eastern and western cultures in the form of guilds (Jacobs, 2016: 2), very little academic research has been dedicated to these institutional intermediaries (Fischer, Pascucci & Dolfma, 2021: 108). A popular example of an industry association is the Health Professions Council of South Africa (HPCSA), which offers its members a professional identity, opportunities for professional development and a way to collaborate in order to have an impact on the medical industry and the larger policy environment (Hung & Hager, 2020: 972). Other prominent examples include the International Council of Mining and Metals (ICMM) (BHP) and the African Fintech Network (Fintech, 2023).

As introduced in Chapter One, SACIA is one of the largest industry associations in the events and communications subsector in Southern Africa (Who Owns Whom, 2020: 28) and, as other industry associations, SACIA is facing challenges with supporting members that have been impacted by the restrictions imposed during the COVID-19 pandemic and the presence of technological advancements that is disrupting the events sector.

2.2.1 The Southern Africa Communications Industry Association (SACIA)

Note: Information on SACIA has been adapted from SACIA (2023).

SACIA is a not-for-profit organisation with the mission of promoting professional standards and ethical business practices in the communications, events and entertainment sectors throughout Southern Africa (SACIA, 2023). SACIA membership is available to any individual or organisation involved in the aforementioned sectors. Corporate and institutional members of SACIA include manufacturers, dealers, distributors, integrators, universities, corporations, government departments, television stations, radio stations, news agencies, satellite operators and production houses. Individual membership is also accessible to anyone working in the events sector. Suppliers of goods and services to the audiovisual (AV) industry such as media, exhibitions, banking, insurance, legal services and recruitment may also become affiliate members of SACIA, which does not include voting privileges.

In addition to the above-mentioned services, SACIA offers a number of benefits to members such as access to member-only events and activities, discounts on SACIA training courses, access to industry research and market intelligence, free admission to industry events, participation in industry networking events and voting rights at SACIA general meetings. All SACIA members are provided with a full range of services throughout the year, and sponsorships also offer value-added advantages. Being a member provides you with a voice in the broadcast and AV community, the ability to choose industry representatives, access to market information and industry research, the ability to take part in SACIA activities and access to a variety of training and certification programmes.

2.2.1.1 SACIA leadership

SACIA is a South African Qualifications Authority (SAQA) recognised professional body and is governed by a board of directors elected from the members, with an executive director appointed by the board, who is responsible for providing strategic leadership to the association. Five board members are elected from the membership, while up to three individuals may be co-opted to the board to address specific skills and attributes that may otherwise be lacking. The executive director, who serves as the association's chief executive officer and is chosen by the board, oversees the association's strategic and operational direction. All board members, except for the executive director, serve without compensation. SACIA is an association governed mainly by its members in support of their profession, with more than fifty members participating on the board or serving in various councils.

All corporate members of SACIA are obliged to uphold the law and the constitution of South Africa and are required to adhere to the SACIA Business Code which represents a commitment to higher standards of ethics and service, and to be held accountable for these standards. SACIA embodies values of trust and quality. A copy of SACIA's code of conduct is attached: See Appendix E.

SACIA's footprint extends across the greater communications and entertainment sector with ten Special Interest Groups (SIGs) that are engaged in different disciplines. These SIGs are run by a council elected from the members who are active in a particular subsector. In total, there are more than 40 members who dedicate their time, energy and effort to leading the association, the various councils and task groups. A number of these SIGs cross over to provide a comprehensive commitment to excellence within a certain market sector. There are three SIGs that serve in the events sector. In this sector, the Council of Event Professionals Africa (CEPA) promotes excellence in event management; the Technical Production Council (TPSA) promotes quality in technical production and live events, and the Event Safety Council encourages a "safety first philosophy" in business, entertainment and sport events.

Although each SIG has an independent focus, there is a greater chance of advancing the commitment to professional standards and ethical business practices in related

professions by establishing a common code of professional conduct for all sectors. The Certification Council oversees the creation of professional designations and the evaluation procedures that accompany each designation. The Certification Council is responsible for ensuring that competency evaluation is applied consistently in the awarding and the preserving of professional designations across all SIGs. The five members of the Certification Council are chosen by the SIG members. Each council may request three extra members to fill any gaps in particular abilities and qualities. The chair of each council is chosen and holds office for two years.

The primary duty of each council is to encourage the adoption of professional standards and reward performance by awarding professional designations. All designated members are listed on the National Learner's Register Database (NLRD) and each of these designations is registered with SAQA, providing formal recognition of a person's knowledge, skills and experience. A code of professional conduct must be agreed to and followed by all certification holders. Members are therefore bound to a higher standard of conduct and ethics. Additionally, members must participate in a "Continued Professional Development Programme" that keeps members abreast of the trends and technologies impacting their profession. Figure 2.1 depicts SACIA's organisational structure.

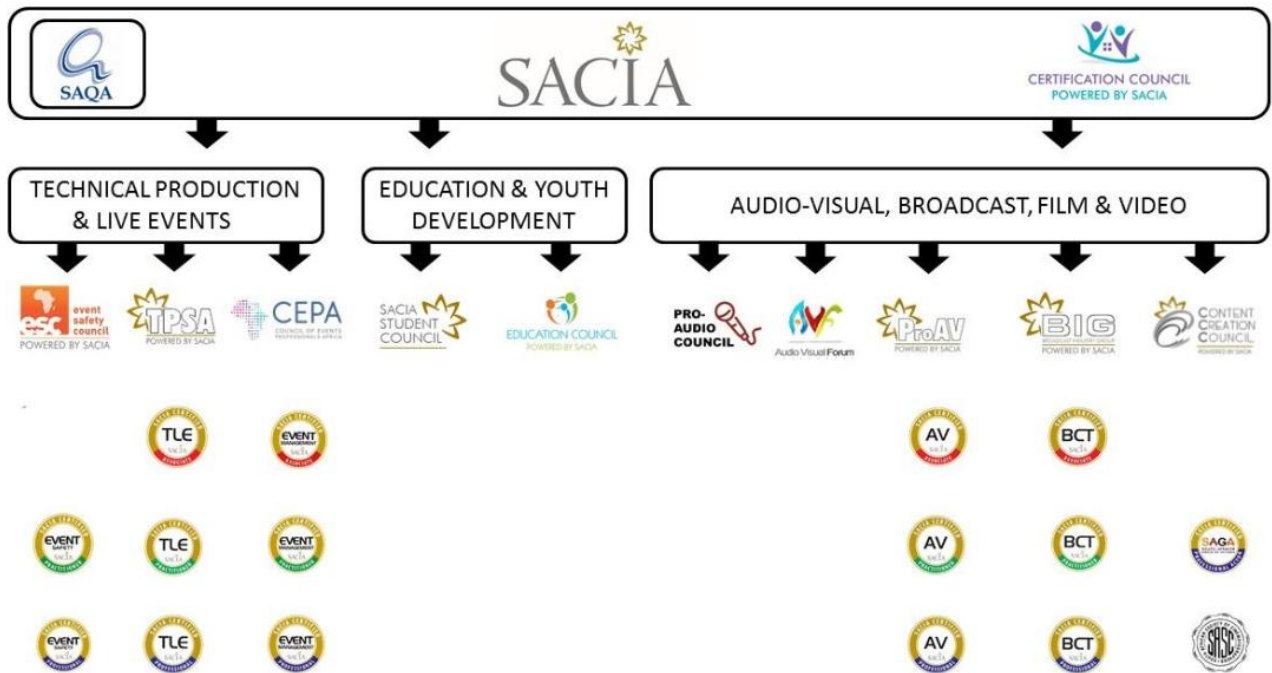


Figure 2.1: SACIA organisational structure

Source: sacia.org (2023)

According to SACIA's executive director Kevan Jones, the real value of joining industry associations becomes evident when members begin to realise that they achieve more by working together as opposed to working independently of each other: *"The real value to SACIA members is that it allows professionals to get together and share resources to solve common problems faced by the sector"* (SACIA, 2023). Members of the event sector look to industry associations to meet their needs by providing educational services, communication services, advocacy, business services, community services, enhancing their buying power (Arcodia, 2022: 311). The next section discusses the broader events sector with special attention on the sport events subsector which is the focus of this study.

2.3 THE EVENTS SECTOR

According to Beech, Kaiser, and Kaspar (2014: 3), an event is something that occurs and can range from something as simple as friends meeting for coffee to major sport events such as the Olympic Games, major cultural events such as the National Arts Festival which takes place annually in Grahamstown, or major conferences such as the G20 Summit or an annual political party conference. Getz and Page (2019: 135) posit further that events typically have a beginning and an end and are defined as a temporal phenomenon with a programme or agenda that is planned and publicised in advance.

Events can be classified into three categories: sport events, cultural/ art/ entertainment events and business events (Backman, 2018: 169). Events can be further divided into the categories of micro, mega and hallmark events, based on their economic significance to the host city and destination, media coverage, anticipated number of visitors and budget (Bjeljac et al., 2017: 55). Micro events refer to smaller scale events that are relatively short in duration and generally do not generate large public interest such as community sport gala or local religious gatherings (Malchrowicz-Moško & Poczta, 2018: 5). Mega-events refer to well-known large scale organised events with a fixed time, duration and place, usually with global media coverage such as the Olympic games or FIFA world cup (Kirby et al., 2018: 917). Hallmark events are highly publicised, major one-time or recurring events of limited duration with key characteristics of uniqueness, status or timely significance such as a one-time clash between two renowned athletes or teams (Todd et al., 2017: 495). Examples of hallmark events include 'The Soweto Derby', which is an annual football clash between Orlando Pirates and Kaizer Chiefs or the 'London Derby' which occurs between Arsenal Football Club and Tottenham.

The South African events sector has grown significantly in recent years (Bob et al., 2019: 1236). According to the South African National Convention Bureau, the country hosted 124 international events in 2019, an increase of 27% from the previous year. In addition, the country received almost ten million international visitors in 2018 with many attending major events such as the Cape Town Jazz Festival, the Durban July Horse Race and the Nedbank Golf Challenge (SA Tourism, 2018). The industry

generates significant revenue for the country, contributing to job creation and economic growth. The events industry in South Africa was worth over R93 billion in 2018, with the sector supporting over 200,000 jobs (Grant Thornton, 2018).

Events offer a chance to promote positive community brands and images to the media, business community and tourists, and they also have the potential to generate economic impact in the form of jobs, tax revenue and improved infrastructure (Getz & Page, 2016: 597). Simply by planning, developing and producing small events that are based on local assets in local communities, the South African events sector has the potential to create 876,785 jobs (Green Economy Media, 2022: 1).

Although the sport events subsector is the focus of this study, the events sector also comprises the cultural/entertainment event subsector and the business events subsector. SACIA also represents members of the cultural events subsector and the business events subsector.

2.3.1 The cultural events subsector

Cultural events such as music, film, dance, arts and crafts and religious festivals are often viewed as a crucial component of the creative industries in many countries (Khlystova et al., 2022: 1192). They are seen as an expression of identity and a chance to showcase the nation's rich and diverse heritage. The cultural events subsector is a diverse and dynamic subsector that encompasses a wide range of activities, concerts, exhibitions and events that play a significant role in promoting local artists and fostering cultural exchange while contributing to the nation's economy (Roux & Coetzee, 2022: 45). South Africa hosts several art festivals such as the National Arts Festival in Grahamstown, which is one of the largest and most renowned cultural events on the continent (SA Tourism, 2022: 1). Many forms of popular culture fit into this category, including music concerts, award ceremonies, theatre, art exhibitions and dance performances. The activities that are frequently part of the cultural events subsector can certainly be viewed as entertaining, but the underlying purpose is different. It must be noted that entertainment is a passive and pleasurable experience without necessarily considering the cultural or historical significance of the event but merely for enjoyment (Boucher et al., 2018: 541).

2.3.2 The business events subsector

Business events, typically in the form of trade shows or trade fairs, are held to increase sales, promote new products and preserve or establish ties within the industry (Mora Cortez et al., 2022: 1092). Business events act as forums for discussion and information sharing among exhibitors, subject matter experts, and attendees, playing an important role in the communication and marketing mix (Flowers & Gregson, 2012: 50). Business events, which are also known as corporate events, can be divided into categories depending on whether they involve internal, external or mixed participation (Bartis & Hufkie, 2021: 102). Events held internally are open only to staff members and include staff training sessions, incentive trips, team-building days and strategy discussions. Examples of external events such as shareholders' meetings and product presentations are attended by people who are not directly employed by the company. Employees and non-employees of the corporation supporting the event are both participants in mixed events such as product launches and corporate hospitality days. According to the Professional Convention Management Association (2019: 1), business events are often staged with three main goals: to inform, inspire, and offer networking opportunities to participants. The ratios of these components may vary according to the type of corporate event in question. As previously established, the sport event subsector, which is the main focus of this study, is the largest. It is therefore discussed in detail in the next section.

2.4 THE SPORT EVENT SUBSECTOR

'Sport' refers to physical activity involving large muscle groups that require strategic methods, physical and mental preparation, and whose outcome is determined, within a rules framework, by skill, and not by chance (Encyclopedia Britannica, 2023: 1057). Sport events tend to dominate the global events sector (Getz & Page, 2019: 38; Miles & Shipway, 2020: 537). In recent years, the magnitude and frequency of organised sport events have increased, creating a greater impact on local residents and entire countries (Mchunu et al., 2022: 102; Zhang et al., 2018: 110). Sport takes place in an organised, structured and competitive environment where a winner is declared. According to Gammon (2020: 113), sport events may be categorised as professional or amateur, indoor or outdoor, local, regional, national or international in scope. Sport

events may also be classified according to their format, which include regularly scheduled tournaments or league championships, one-off sport ‘spectaculars’ aimed at media coverage or spectator engagement, exhibition matches involving touring or invited teams, festivals that emphasise celebration or youth participation and multi-sport events such as the Olympic Games and the Masters Games.

Given the massive number of sport activities that take place constantly all over the world and the growing diversity of sport forms, sport events make up a vast category. The annual event ticket sales (that is, entertainment and sporting events) in South Africa were approximately R4.8 billion in 2022, with sport events having the largest share of the market at R1.96 billion in 2022 (Statista.com, 2022). Therefore, it is evident from the above information that sport events dominate the event industry and have a significant impact on society justifying the focus of this study, which is sport events, a subsector of the events sector.

2.4.1 The history and evolution of the sport events subsector

The history of sport events dates back more than 2000 years. In ancient times, sport events took place during cultural or political gatherings and religious celebrations. (Gardiner, 2019: 10). Similar to the present, events in ancient times often had a political function, such as the Roman ‘circenses’ which combined social events with political purposes, or the first Olympic Games which included sport competitions and religious ceremonies (John et al., 2016: 10). The evolution of the various sport events had a significant impact on the historical development of sport and event venues. When examining ancient stadiums such as the Circus Maximus or the Coliseum in Rome, Schwarz et al., (2016: 15) found that these structures served multiple purposes and were intended to house ancient sporting activities, religious rituals and entertainment events.

The middle-ages were not a particularly noteworthy time for the development of sport and sport events due to the strong influence of the church— sport as an activity was generally less common, less organised and less professional (Pushparaj, 2021: 111). During the Renaissance period, sport was becoming less violent and military-based and began to be used for recreational activity (Pickel-Chevalier, 2017: 1). Sport clubs

and associations were developed which promoted a sense of unity and fair play (Gems et al., 2022: 123).

The construction of The Arena on the March Field in Paris by the end of the 19th century for several hundred thousand spectators indicated that the 19th and 20th centuries were crucial for the development of modern sport events (Desbordes, 2019: 172). New types of sport and sport trends were introduced due to the expansion of sport stadia infrastructure. Intercollegiate sport, a sort of athletic competition between schools that supported the development of sport event infrastructure, was established by nations like the USA (Ridpath, 2018: 5). Figure 2.2 represents a timeline depicting the historical development of the sport events subsector.

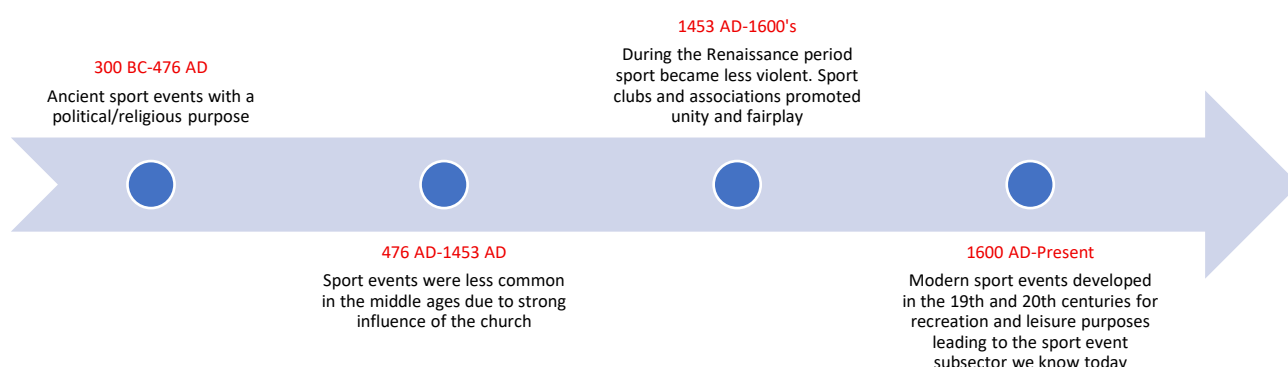


Figure 2.2: Timeline depicting the historical development of the sport events subsector

(Source: Authors compilation)

2.4.2 Economic contribution of sport events

Sport events play a vital role in South Africa's economy by stimulating tourism, creating jobs, boosting local businesses and improving infrastructure (Daniels & Tichaawa, 2021: 1241), contributing to the country's international profile and fostering economic growth and development. The South African sport industry contributes an estimated R50 billion to the total GDP of approximately R4.5 trillion (Allie, 2023: 1).

Previous economic studies have looked at the advantages of sport events for urban redevelopment, increased trade and industrial productivity (Evans, 2020: 116). These

benefits are typically associated with large-scale events that call for considerable governmental and private investments. An event that attracts investment, grants, sponsorship, or tourism generates economic benefits by bringing additional funds into a region (Salgado-Barandela et al., 2021: 436). When it comes to employment effects, typically only mega-events generate a lot of construction and thereby stimulate employment growth. Mega-events typically generate sizable tax returns for government, regardless of whether they invest in them or not. These events are frequently designed with urban redevelopment and development in mind, which may result in long-lasting changes to the environment and local economy (Ferrari & Guala, 2017: 120).

Sport events as 'big business' have become recurring themes known to generate civic turn around (Getz & Page, 2016: 593). Coates and Humphreys (1999: 601) observed that American cities placed great importance on sport and entertainment as a source of revenue for the cities during the 1980's and 1990's. According to UK Sport (2023: 1), sport events have taken the lead in many community efforts to revitalise the economy in the United Kingdom.

Major sporting events attract a significant number of tourists who spend money on accommodation, dining, transportation and entertainment, thereby boosting the hospitality and tourism sectors (Kim et al., 2017: 65). Sport events generate revenue from ticket sales and the sale of event-related merchandise, such as jerseys, memorabilia and branded souvenirs which contribute to the overall economic output of the country (Papadimitriou & Apostolopoulou, 2018: 412). Hosting sport events requires a workforce, from event organisers to security personnel, hospitality staff and volunteers which leads to temporary and sometimes long-term job creation, reducing unemployment rates and improving the livelihoods of local communities (Rogerson, 2018: 297). Preparing for sport events often necessitates significant investments in infrastructure, such as stadiums, transportation networks and accommodations. These infrastructure improvements can have long-lasting economic benefits, including enhanced tourism and business opportunities (Overmyer, 2017: 5). Sport events attract sponsors and advertisers, who invest in promoting their brands and products during the events. These sponsorships and advertising deals contribute to the revenue generated by sport events and support the local economy (Cook et al., 2023: 812).

International sport events held in South Africa garner substantial media attention that promotes tourism and showcases the country as an attractive destination for investment and business opportunities (Tichaawa et al., 2018: 185). Hosting sport events encourages sport participation and active lifestyles among the local population which may have long-term benefits in terms of reduced healthcare costs and improved overall productivity (Keane et al., 2019: 2204). Successful hosting of sport events can enhance South Africa's global reputation, attracting foreign investment in various sectors, including tourism, infrastructure development and technology (Knott et al., 2017: 900).

Sport and recreation make a significant contribution to building social and human capital by improving the resilience of communities through increased community mobilisation and organisation (Rich & Misener, 2020: 272). Social capital development has enhanced the psycho-social behaviour of children in the Western Cape, through interventions such as the Mass participation; Opportunity and access; Development and growth (MOD) centres, and has improved trust and social relationships, boosted learner confidence and social collaboration among community members (SA Gov, 2019).

Finally, in addition to providing entertainment, exercise and a sense of camaraderie, sport events provide social value for the youth. As Late President Nelson Mandela said: "Sport has the power to change the world. It has the power to inspire and to unite people in a way that little else does. It speaks to the youth in a language they understand. Sport can create hope, where once there was only despair" (The Global Goals, 2021) . Sport events as a symbol of personal social responsibility meet the values of the younger generation (Erickson, 2017: 16)

2.4.3 The impact of COVID-19 on the sport events subsector

COVID-19 is a novel virus that was first detected in the Chinese city of Wuhan in 2019 (World Health Organisation, 2020). Delayed and inadequate measures to contain the spread of the virus led to the World Health Organisation (WHO) declaring a pandemic (Sohrabi et al., 2020: 71). By early 2020 COVID-19 had spread to several countries and was wreaking havoc across the globe (BBC News, 2021). On 15 March 2020,

President Cyril Ramaphosa declared a national state of disaster, and South Africa was placed under a lockdown (The Presidency, 2020). Immediate restrictions were placed on travel, large gatherings and other non-essential services to mitigate the spread of the virus. The prohibition of gatherings had direct implications for the events sector as a whole and specifically the sport events subsector.

Industry associations, especially those in the event industry, were severely impacted by the COVID-19 pandemic and did not receive sufficient legislative or financial support from government agencies (Jung et al., 2022: 2113). Some of the major challenges the industry associations faced during the pandemic included a significant decline in memberships and the cancellation of face-to-face events (Brooks & Patel, 2022: 2). According to Forbes (2020: 1) 56% of associations had to cancel major trade shows, face-to-face meetings and other planned events. It is expected that these cancellations will have a negative effect on the associations' annual revenue for upcoming years (Sánchez-Aguirre & Van Winkle, 2022: 493). Despite these enormous financial losses, many COVID-19 economic relief fund provisions were directed to the private and commercial sector rather than non-profit organisations such as industry associations (Johnson et al., 2021: 33). The restrictions on events during the pandemic left many SACIA members without work, with little to no support from the government for the events sector. SACIA initiated the "Light SA Red" movement to garner support and draw attention to the plight facing SACIA members as a result of the cancelled events (Independent Online, 2020). The Light SA Red movement was a call for government to extend COVID-19 relief funds to the events sector by lighting iconic buildings across South Africa in red.

Considering the threat posed by the pandemic and given that pandemics are both unpredictable and recurring events throughout history (Qiu et al., 2017: 4), associations such as SACIA have been re-assessing their operations and services and making substantial adjustments to their business models. Leaders of industry associations indicated that the underlying themes of recovery strategies are based on the duty of care and sharing relief and recovery efforts with legislative bodies (SA Tourism, 2020).

Despite these extensive recovery efforts, the primary sources of revenue for industry associations, which are registration fees charged to attendees at annual conventions and other meetings, fundraising events, sponsorship income and membership dues (Fenich, 2019) were significantly reduced due to pandemic-related restrictions and COVID-19's effects on the economy. In addition, 65% of the industry associations that cancelled an event lacked adequate insurance coverage to cover the costs incurred by the cancellations (Jung et al., 2022: 2113). Industry associations were forced to make budgetary changes as a result of being prohibited from holding events that would typically account for substantial portions of their total earnings (Ertaş et al., 2021: 1490). To develop sustainable revenue sources instead of focusing on cost-cutting measures or staff reductions, industry associations must identify what impact they can have on their members and the broader communities they serve (de Lange, Jackling & Gutierrez-Huerter, 2022: 1057).

An unexpected crisis like COVID-19 can disrupt all business activities and profoundly impact all sectors by causing dramatic reductions in or even the complete cessation of business activities (Alketbi et al., 2020: 541). Notwithstanding, industry associations have implemented a variety of measures to aid in the recovery of the event sector, their members, and society at large, including fundraising, distributing updates and guidelines, educating, and offering education and new skill and knowledge training. While there is no doubt that these efforts will create a supportive business environment, industry associations need to strategically position themselves, not only to survive but also to thrive during the post-crisis recovery from COVID-19 (Chanyasak et al., 2022: 616; Lee & Trimi, 2021: 15; Obrenovic et al., 2020: 5981). When an unexpected crisis emerges, organisations adapt by providing supportive opportunities to help members maintain performance and mitigate some of the negative impacts (Koronis & Ponis, 2018: 32). White (2017: 43) maintains that successful associations adapt their strategies to fit the environment.

The association's ability to respond appropriately to a crisis is key to its sustainability (Miceli et al., 2021: 2052). It is believed that a fit between the crisis and an association's recovery strategy will encourage stakeholders to view the association as competent, altruistic and reputable so that members transfer positive feedback about the reactions of the association to the association itself (Rim & Ferguson, 2020: 545).

Although previous studies have somewhat covered crisis and risk management to address the recent COVID-19 crisis in various sectors, including events, it is still far from having enough evidence to properly guide the industry into a new normality (Coles et al., 2022: 2). Future research could evaluate if the association's current services and strategies are adequate for the needs of its members after COVID-19 (Rodríguez-Rad & Sánchez del Río-Vázquez, 2023: 9)

The outbreak of the COVID-19 pandemic in early 2020 had a profound impact on various sectors worldwide, including the sport events subsector in South Africa. Disruptions to the sport events subsector included the following items highlighted and explained below:

Suspension and cancellation of sporting events

The COVID-19 pandemic led to the suspension and cancellation of numerous sporting events in South Africa, including major tournaments like the South African Premier Soccer League, rugby matches, cricket tours and international athletics events. These disruptions resulted in a significant setback to the industry, affecting not only the revenue streams but also the livelihoods of athletes, event organisers and associated businesses (Perold, 2020: 2).

Financial and economic losses

The financial impact of the pandemic on the sport events subsector in South Africa has been substantial. The closure of stadiums, the absence of ticket sales, reduced sponsorship deals, and limited broadcasting revenue all contributed to significant losses for the sport events subsector (Keshkar et al., 2021: 2). According to a report by Price Waterhouse Coopers, South Africa's sport events subsector faced a decline of up to 40% in revenue in 2020, amounting to a potential loss of R6 billion (PwC, 2022: 1). Revenue streams from ticket sales, broadcasting rights, sponsorships and merchandise sales were significantly impacted. The absence of spectators in stadiums led to a sharp decline in ticket revenue, as well as reduced opportunities for concessions and merchandise sales. Broadcasters faced challenges in attracting advertisers and sponsors due to the uncertainty surrounding sport events. These

financial losses threatened the economic sustainability of sport events in South Africa (Mchunu et al., 2022: 102).

Unemployment and job losses

The suspension and cancellation of sport events had a direct impact on employment in the subsector. Individuals such as stadium staff, security personnel, vendors and event organisers to athletes and coaches faced job losses or reductions in income (Du Plessis, 2021: 2). This not only affected the immediate stakeholders but also had a trickle-down effect on related industries, such as tourism and hospitality. The resulting economic impact affected the livelihood of individuals and families dependent on the sport events subsector, leading to potential long-term consequences for the overall sustainability of the sector.

Infrastructure development and upkeep

Prior to the pandemic, South Africa had invested heavily in infrastructure development to host major international sport events (Khumalo & Makgopa, 2021: 201). The postponement and cancellation of tournaments disrupted the utilisation and maintenance of these facilities, resulting in financial strain on local authorities and potentially impacting future event-hosting opportunities. The closure of stadiums and training facilities meant that ongoing maintenance costs remained, while revenue from events was significantly reduced or non-existent. The strain on infrastructure funding and upkeep posed challenges to the long-term sustainability of venues and facilities.

Fan engagement and experience

Sport events are known for their lively atmosphere and fan engagement. However, the pandemic necessitated restrictions on attendance, leading to matches being played in empty stadiums or with limited spectators. This absence of fan engagement not only affected the revenue generated from ticket sales but also diminished the overall experience for players and viewers, impacting the long-term sustainability of the sport events subsector (Holt et al., 2020: 468).

Sponsorship challenges

Sponsorship plays a crucial role in funding sport events. However, the pandemic forced many businesses to cut back on marketing budgets and sponsorship deals. With economic uncertainties and reduced brand visibility due to limited or no spectator presence, sponsors have become hesitant to invest in sport events. This poses a significant challenge for event organisers in securing and retaining sponsors, further impacting the financial sustainability of the subsector (Fick & Higham, 2021: 2).

Uncertainty and disruption

The pandemic brought unprecedented levels of uncertainty and disruption to the sport events industry. Frequent changes in lockdown restrictions, travel bans, and public health regulations made it challenging for event organisers to plan and execute events effectively. The uncertainty surrounding the timing and duration of the pandemic made it difficult to secure dates, venues and participants for future events. This lack of stability and predictability created barriers to the long-term sustainability of the sport events subsector in South Africa (Lazarus et al, 2021: 226).

Psychological impact on athletes

The pandemic also had a tremendous psychological impact on athletes, affecting their motivation, training and performance (Uroh & Adewunmi, 2021: 5). Uncertainty surrounding event schedules, limited training opportunities and the absence of spectators diminished the overall sporting experience. This psychological toll on athletes could potentially impact the talent pool, participation rates and overall sustainability of sport events in the future (Shukla et al., 2023: 3).

The COVID-19 pandemic severely affected the sustainability of the sport events industry in South Africa. Financial losses, sponsorship challenges, uncertainty, job losses, infrastructure strain and psychological impacts on athletes have all contributed to the subsector's vulnerabilities. Moving forward, effective recovery strategies, innovative revenue models, enhanced safety protocols and collaboration between stakeholders will be crucial to ensure the long-term sustainability and resilience of the sport events industry in South Africa (Sharma & Bhat, 2023: 320). While virtual

engagement and enhanced safety protocols provided some relief during the pandemic, the sport event subsector has continued to adapt and innovate to ensure its long-term sustainability (Mirehie & Cho, 2022: 528). Collaboration between stakeholders, innovation and strategic planning is essential in rebuilding the sport events subsector and restoring its vibrancy.

2.5 CONCEPTUALISING SUSTAINABILITY IN THE SPORT EVENTS SUBSECTOR

The concept of sustainability can be a vague term as it has various interpretations and levels of complexity depending on the context in which it is used. According to Beech, Kaiser and Kaspar (2014: 40), a standard definition of sustainability was established by the United Nations Brundtland Report (1987: 1), which suggests that sustainability involves the ability of an organisation to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. Within the context of the sport events subsector, sustainability is commonly understood as a multidimensional concept encompassing economic, social, environmental and operational dimensions (Dowling, 2020: 6). Economic sustainability within sport events refers to the financial viability of events, including revenue generation, cost management and the ability to withstand external shocks such as event cancellations (Dowling, 2020: 8). Social sustainability relates to stakeholder wellbeing, inclusivity, community engagement and the maintenance of the social and experiential value associated with sport events (Mallen & Adams, 2019: 13). Environmental sustainability concerns the minimisation of negative environmental impacts linked to event delivery, such as resource consumption, travel and waste generation (McCullough, Orr & Kellison, 2020: 4). Operational sustainability refers to the capacity of sport event organisations to maintain continuity and adapt operational models through innovation and strategic change in response to disruptions (Getz, Svensson & Wood, 2021: 102).

A broader understanding of sustainability therefore encompasses preserving, conserving and maintaining the sport events industry for future generations through adaptive and resilient practices (Kakderi et al., 2021: 15). During the COVID-19 pandemic, many sectors sought to enhance sustainability through the utilisation of

online platforms and digital spaces, practices that have continued beyond the immediate crisis period (Rachmawati et al., 2021: 1). Similarly, the sport events subsector in South Africa adopted virtual and digital technologies to mitigate the challenges posed by COVID-19 and increasingly considered the expanded use of digital solutions to support economic resilience, social engagement and operational continuity, attempting to strengthen the long-term sustainability of the sport events subsector against future industry disruptions.

During the pandemic, several businesses turned to technology to facilitate operations (Westmattmann et al., 2021: 1), a trend which Dujuan (2021: 1) considers likely to continue as society attempts to adjust to the new normal in the post pandemic era. Various industries are now using technologies such as Zoom and Microsoft Teams to adopt a hybrid approach of working (Gratton, 2021: 65). The retail sector, as another example, has similarly shifted to more digital platforms such as Temu and Takealot, offering consumers the freedom, convenience and safety to shop from home (Mckinsey, 2020: 1).

Due to the digital trend highlighted above, the need to explore the possibility of sustaining the sport events subsector through enhancing its digital capabilities is supported. Woyo and Nyiyamande (2021: 1) highlight that the debate to digitise sport events has been growing strongly even before the pandemic and recommend that the use of alternative technologies such as virtual and augmented reality, fantasy leagues and applications which allow spectators to engage from anywhere be researched further and considered to strategically move the sport events subsector forward in the post-pandemic world. Sportspromedia (2022: 1) named FIFA World Cup 2022 as the “first digital world cup” in history, and the organisers of the Paris Olympic Games 2024 have made digital technology and innovation the centre stage of the event. Hemmonsbey et al. (2021: 54) highlight the need for members of sport associations to work collaboratively to overcome current challenges and facilitate safe and enjoyable sport events in the future.

2.6 DIGITAL TRANSFORMATION AS A TOOL FOR THE SUSTAINABILITY OF THE SPORT EVENTS SUBSECTOR

Digital transformation (DX) has become increasingly vital for the success of industries across the globe, and the sport events subsector is no exception (Stegmann et al., 2023: 1221). The implementation of digital technologies presents significant opportunities to enhance the sustainability and resilience of the sport events subsector in South Africa. DX provided viable alternatives to live events during the pandemic by enabling virtual competitions and hybrid formats (Shin, 2019: 1). Financial and economic losses were partially mitigated through digitised revenue streams, such as online streaming and digital ticketing (Glebova et al., 2022: 54). Innovations such as AR and VR can significantly improve fan engagement and sustain interest despite physical restrictions (Krieger, 2024; Rodrigues, 2020: 1). Sponsorship challenges can also be addressed by shifting toward digital activations and data-driven campaigns (Frawley & Schulenkorf, 2023: 1). The integration of DX in sport events offer psychological resilience for athletes who felt isolated or demotivated due to the cancellation of events (Schinke et al., 2020: 269).

Ebert and Duarte (2018: 16) define DX as the technology-driven continuous change process that companies, industries and society undergo. The cornerstone of digital transformation is embedded in computing, connectivity and developing flexible value streams (Voskerichyan & Baiming, 2024: 235). DX involves adopting disruptive technologies to increase productivity, enhance value creation and social welfare (Vrontis et al., 2022: 7949). The adoption and implementation of DX affect the industry business environment by providing better value-chain integration and new market exploitation, with competitive advantage gains (Sahut et al., 2020: 62).

In addition to sustainability, DX has the potential to help achieve a number of social and economic objectives such as fostering a more innovative and collaborative culture in the subsector and society, providing new skills and future orientation to people involved in digital roles, promoting governance, accessibility and quality of service, strengthening data protection, transparency and trust, increasing income generation, productivity and value, and improving regulatory frameworks and technical standards (Ebert & Duarte, 2018: 18).

DX is driven by innovation and a variety of technologies. During the national lockdowns in 2020, and in adherence to the prohibitions on meetings and events, technology emerged as the hero providing a means of business continuation to a variety of industries (Gregurec et al., 2021: 2). Business meetings and seminars continued online using platforms such as Zoom, and the retail industry sought relief from online platforms providing these industries with a means of sustainability during the lockdown periods (Pandya et al., 2025: 403).

When the restrictions came into effect, sport events organisations had to make important decisions: to suspend activities, to carry them out while adhering to the restrictions, or to find alternatives through the application of innovative solutions in the organisations. Innovation is helping the sport events subsector to stay active and find better solutions to deal with the challenges arising from the COVID-19 pandemic (Mardosaite & Jasinskas, 2022: 94). Among the digital innovations that were implemented in other countries during the COVID-19 pandemic were virtual reality (VR), augmented reality (AR) and artificial intelligence (AI) solutions (Rane et al., 2023: 2). According to Oxford Languages (2022: 1079), VR is a technology that integrates several other technologies to enable people to experience a world beyond reality. AR allows elements of the digital world to integrate with the real-world and AI refers to computer simulated human behaviour (Sheng et al., 2021: 1164). Woyo and Nyamandi (2021: 31) analysed a virtual comrades marathon which took place in South Africa on the 14 June 2020 and found that virtual events were much easier to operate during the lockdowns than in-person events.

According to Daniels et al. (2015: 4) innovation is key to the sustainability of the sport event subsector, as sport fans have become reluctant to return to the sport stadia and are now accustomed to viewing from the comfort of their own homes (Hooshmand et al., 2023: 73). Although sport events are once again being hosted in South Africa, Skinner and Smith (2021: 323) believe the consensus from stakeholders is that sport fanatics' behaviour has permanently changed as they are now demanding an engaging and high-quality experience at every point of the sport event.

By leveraging digital technologies to enhance fan engagement, expand reach, personalise experiences and diversify revenue streams, the sport events subsector

can adapt to changing market dynamics and ensure its long-term sustainability (Glebova & Madsen, 2024: 1). Nosratabadi, Atobishi and Hegedűs (2023: 126) acknowledge that addressing the challenges related to the digital divide, technological infrastructure, data privacy and security will be crucial to ensure equitable and sustainable digital transformation in the sport events subsector.

2.7 SUMMARY

This chapter has provided further information on the role and functions of SACIA and the benefits provided to members by industry associations. The broader events sector in South Africa was discussed, identifying the sport events subsector as a dominant subsector, followed by business events and cultural events. The impact of COVID-19 was discussed revealing a threat to the sustainability of the sport events subsector. The concept of DX was introduced as a possible tool for the future sustainability of the sport events subsector. The next chapter focuses on the nature of innovation and DX, possible barriers to DX and the innovation theories that form the theoretical basis for this study.

CHAPTER THREE: THE NATURE OF DIGITAL TRANSFORMATION AND INNOVATION

3.1 INTRODUCTION

Digital transformation (DX) was introduced in Chapter Two as a possible means of ensuring the sustainability of the sport events subsector. The process of DX involves adopting disruptive technologies to fundamentally change the way businesses or industries operate thereby increasing productivity, value and social welfare (Kraus et al., 2022: 2). Innovation refers to the introduction of something new, such as ideas, techniques, or processes that enhance current value propositions or increase subsequent offerings (Edwards-Schachter, 2018: 65). The concepts of DX and innovation are thus closely related: DX can be driven by innovation and innovation can be driven by DX.

Chapter Three explores the nature of DX and innovation, the drivers of innovation with special focus on technology as a driver of innovation, and the possible technological interventions that can be used to assist in the future sustainability of the sport events subsector. This chapter will further establish a theoretical background for the study and discuss the potential barriers and facilitators of DX. The next section begins by defining innovation and describing the different types of innovation.

3.2 INNOVATION

As mentioned previously, innovation involves the creation and implementation of novel products, services and technologies while DX refers to the combined effect of several digital innovations that change the structure, practices, values and beliefs, and replace or complement existing rules within organisations and fields (Hinings et al., 2018: 52). DX refers to a long-term strategic view that incorporates a change in the scope and direction of businesses and industries, with the aim of implementing a comprehensive approach to innovation that enables organisations to become more effective and efficient in their processes and outputs (Mergel et al., 2019: 1). DX is mostly associated with the need to use new technologies to remain relevant in the age of the internet

where services and products are delivered both online and offline. DX offers a way to rebuild business models following the needs of customers using new technologies and innovations (Gong & Ribiere, 2021: 2). Innovation can take on many forms, each contributing to the advancement of industries and societies (Edwards-Schachter, 2018: 66). The types of innovation are explained below.

3.2.1 Types of innovation

Unson, Wang and Harrison (2023: 4) propose two types of innovation; namely: product innovation and process innovation. According to their definition, product innovation involves the development of novel goods or services, often integrating technological breakthroughs or creative enhancements to meet the evolving needs of consumers, such as the integration of automated ticketing systems and real-time crowd management technologies. Process innovation focuses on refining operational methods, streamlining workflows and boosting efficiency, with the aim of reducing costs and improving productivity, for example cloud-based event logistics platforms. Several other types of innovation have been identified from the literature such as incremental innovation which entails making gradual enhancements to existing products or processes and optimising their performance or user experience (Zhang et al., 2023: 145). Furthermore, radical or disruptive innovations introduce novel ideas and technologies that reshape entire markets and value chains and can render previous norms obsolete (Christensen et al., 2015a: 45; Skog et al., 2018: 431). Social innovation represents another form of innovation that tackles societal challenges by introducing new approaches to address issues such as healthcare, education and poverty (Sheik et al., 2023: 1). Lastly, open innovation emphasises collaboration with external partners and resources to drive progress (Rasiah, 2019: 1). Overall, the various types of innovation strategies highlight the ways in which human creativity drives progress and transforms industries. The next section explores the drivers of innovation.

3.2.2 Drivers of innovation

Drivers of innovation refer to the key factors that propel and promote innovation within organisations and society as a whole (Odei et al., 2021: 1331). These drivers can

range from technological advancements and market demands to organisational culture and government policies (Yuan & Cheah, 2020: 25). Understanding and harnessing the drivers of innovation is a vital component for companies to remain competitive and adapt to an evolving business landscape. Several factors can influence innovation which include the organisation's size, structure, market forces (such as competition) environmental factors (such as the lockdown during COVID-19) and the development of new technology (Chen et al., 2021: 37). Innovation allows organisations to adapt to evolving demands or discover new opportunities, and thus, is often viewed as the core of organisational effectiveness and sustainability (Hoff et al., 2023: 24).

Before the COVID-19 pandemic, innovation in the events industry was aimed at increasing profits or outsmarting the competition (Getz & Page: 2016: 363). However, the crisis of the pandemic has set new targets for innovation, those of resilience and sustainability (Gregurec et al., 2021: 1). Resilience and sustainability both represent forward-looking concepts that help companies explore their business and policy options for dealing with uncertainty and change. Southwick et al. (2014: 2) define resilience as “a capacity to prepare for, respond to, or bounce back from problems and disturbances”. In a business context, resilience can be understood as an organisation's ability to adapt to its environment and any new circumstances to mitigate an incident's effects (Hadi & Supardi, 2020: 4070). Sustainability encompasses preserving, conserving and maintaining an industry for future generations (Kakderi et al., 2021: 15). The COVID-19 pandemic highlighted the need for greater resilience in the sport events subsector to mitigate future pandemics and threats. Exploring a possible digital transformation of the sport events subsector through innovation may assist in building the much-needed resilience to ensure the future sustainability of the sport events subsector.

Drivers of innovation can be classified as internal or external (Brancati et al., 2022: 1499). Internal drivers of innovation refer to the practices within the organisation, sector or within the organisation's micro-environment. An organisation's micro-environment includes those that closely surround and interact with the industry; for example, customers, suppliers and competitors are the ‘key stakeholders who are affected by innovation or who can affect it (Markovic & Bagherzadeh, 2018: 174).

External drivers of innovation refer to the environmental forces which consist of an array of macro-level social, legal, technological, economic and political factors that can significantly impact an organisation's incentives and capabilities for innovation (Damanpour, 2020: 5).

3.2.2.1 Internal drivers of innovation

Organisational culture is a primary determinant of innovation and is often expressed by pro-innovation leaders (Damanpour, 2020: 4). Organisational culture refers to the values, beliefs and assumptions that define how a firm conducts its business (Martínez-Caro et al., 2020: 2). Innovation is often dependent on the abilities and attitudes of individuals within an organisation (Cole et al., 2020: 582), specifically, those in leadership positions which directly influence strategy, expectations, allocation of resources and the implementation of policies. Skilled leaders who have a positive attitude toward, and an understanding of, innovation tend to promote an organisation-wide adoption of innovation (Koziol-Nadolna, 2020: 3).

DX is a significant driver of innovation and is primarily propelled by internal policy (Peng & Tao, 2022: 6). DX in the sport event subsector entails transforming traditional models of sport event management into an innovative digital realm where data is leveraged for decision-making processes, enhancing fan engagement, streamlining operations and creating new revenue streams (Rossi et al., 2018: 2). The transition to a digital paradigm is associated with significant changes, not only in operational aspects but also in the value-creation process. DX is gaining traction within the South African sport event subsector (Bourne, 2024). This is mainly attributed to the rapid rise of internet penetration and the widespread use of smartphones in the country (Maurer & Bartsch, 2016: 148). The online shift has increased customer demand for digital services during sport events. Companies are responding by using technologies to increase fan engagement, streamline logistical operations and implement innovative marketing strategies (Yiapanas, 2023: 1).

Another important driver of innovation is the pursuit of sustainability. Rezak, Djenouhat and Kherbachi (2023: 2) note that the integration of sustainability into innovation has become a significant trend in most fields. Companies are recognising the importance

of incorporating sustainable practices into their innovation processes to address pressing global challenges such as climate change and resource scarcity and sport events are no exception. By adopting sustainable practices and considering the environmental and social impacts of their products and processes, companies can create innovative solutions that not only meet market demands but also contribute to long-term sustainable development goals (Mercado-Caruso et al., 2020: 2).

3.2.2.2 External drivers of innovation

Several external forces such as pandemics, climate change, evolving societal expectations and advancements in technology have been identified as drivers of innovation in the sport events subsector.

Pandemics and health crises

The COVID-19 pandemic forced the sport events subsector to rethink how events are hosted. Social distancing measures accelerated the adoption of virtual and hybrid events, with technologies like AI-powered crowd monitoring, contactless ticketing, and bio-secure bubbles becoming standard practice (Perić et al., 2021: 835). For example, Wimbledon 2021 leveraged AI-generated audience noise to maintain engagement despite limited spectators (Pillai et al., 2022). Additionally, eSport and remote fan engagement platforms flourished, ensuring revenue continuity even when physical attendance was restricted (Ratten et al., 2021: 265)

Climate change and sustainability pressures

Extreme weather conditions due to global warming and resource scarcity have made environmental sustainability a key driver of innovation in sport events. The use of green technologies, strategies to offset carbon emissions and eco-friendly infrastructure are increasingly being adopted to align with global sustainability goals (Trendafilova et al., 2023: 469), for example, the use of recycled materials for medals and hydrogen-powered transportation to minimise carbon emissions in the Tokyo 2020 Olympics (Iyer et al., 2025: 409). Similarly, FIFA's 2022 World Cup in Qatar incorporated climate-controlled stadiums powered by solar energy, to address concerns of extreme heat in the middle east (FIFA, 2022).

Societal and cultural shifts

Changing societal expectations surrounding diversity, inclusion and ethical business practices have driven innovation in sport event management. Gender equity in sport, digital accessibility and fan-driven experiences are now prioritised by organisations seeking to remain relevant (Kim, 2025: 1). The UEFA Women's EURO 2022 saw record attendance and viewership, partly due to digital campaigns promoting gender inclusivity and accessibility (UEFA, 2022). Additionally, sport bodies are adopting AI-powered fan engagement tools such as Chatbots and voice assistants that cater to diverse audiences and ensure a more inclusive experience (Bayindir, 2024: 1; PwC, 2023).

Technological advancement as a driver of innovation

Planing (2017: 11) identifies technological advancement as a significant external driver of innovation. Developments in technology often influence organisations to adopt and implement new technologies to become more efficient (Zhang & Jin, 2023: 264). Technology innovations include the specific adjustments that are made with the technology used in event management to accommodate changes in human behaviour due to pandemic-related issues, such as cleanliness, social distancing and regulations (Shin & Kang, 2020: 2).

The adoption of digital technologies in the sport event subsector has become a fundamental driver of innovation within the field. The integration of technologies such as mobile tools and applications, social media platforms, the Internet of Things (IoT), analytics tools and collaboration platforms have revolutionised the way sport events are organised, managed and experienced (Patano et al., 2017: 1). One of the key benefits of digital transformation in sport events is the ability to enhance fan engagement. Through mobile apps and social media platforms, fans can now have real-time access to live scores, player statistics and behind-the-scenes content. This level of engagement not only increases the fan experience but also provides valuable data for marketers and event organisers (Lamirán-Palomares et al., 2020: 2).

According to Daniels et al. (2015: 1), innovation is key to the sustainability of the sport event subsector. As previously noted in Chapter Two, spectator behaviour has evolved post-COVID. Recent insights by Daniels and Tichaawa (2023: 108) confirm that fans

now expect a more engaging, technology-enhanced experience at live events. and are reluctant to return to the sport stadia.

Owing to the dynamic landscape of technological advancement, innovation has become a critical driver of economic growth and societal progress (Planing, 2017: 1; Tria, 2016: 1). The next section aims to provide a comprehensive review of the theories of innovation, exploring its key principles, historical context and practical implications.

3.2.3 Theories of innovation

Four theories of innovation were considered to guide the theoretical perspective of this research. They include the adjacent innovation theory, the incremental innovation theory, the radical innovation theory and the disruptive innovation theory. Each innovation theory has unique characteristics and is applicable to a particular scenario as explained below.

3.2.3.1 Adjacent innovation theory

The adjacent innovation theory suggests that groundbreaking advancements often emerge from the intersection and integration of existing technologies or ideas (Innosabi, 2024). The concept of adjacent innovation is rooted in the idea that innovation rarely occurs in isolation but instead involves the convergence of diverse knowledge domains, resulting in novel and unexpected solutions (OECD, 2016: 3). The framework of adjacent innovation challenges traditional linear models of innovation by emphasising the importance of cross-disciplinary collaboration and the leveraging of existing knowledge pools (Nagji & Tuff, 2012: 66).

Curley and Salmelin (2018: 40) characterised adjacent innovation by the following key principles. Firstly, it involves the identification of adjacent knowledge domains and the exploration of potential intersections. This requires a keen awareness of emerging trends and a proactive approach to cross-disciplinary collaboration. Secondly, successful adjacent innovation requires a culture that fosters experimentation and tolerates failure, as not all attempts at convergence will yield positive results. The implications of adjacent innovation theory extend beyond theoretical frameworks.

Organisations seeking to follow an adjacent innovation strategy must cultivate an environment that encourages diverse perspectives, facilitate knowledge sharing and support risk-taking (Hock-Doepgen et al., 2021: 683). Additionally, policymakers facilitate the process by creating incentives for cross-sector collaboration and investing in research initiatives that promote interdisciplinary exploration (Holgersson et al., 2022: 5).

The adjacent innovation theory is applicable when an organisation uses existing strengths and capabilities to reach new audiences (Satell, 2017: 4). Examples of adjacent innovation in modern times are the National Aeronautics and Space Administration's (NASA) breakthroughs for the United States space programme which also evolved into ideas for the invention of memory foam, firefighting equipment, cochlear implants, Velcro and Teflon (Cyprusinno, 2020). Although the theory of adjacent innovation offers a valuable lens through which the complex and interconnected nature of technological progress is understood, it does not adequately reflect the situation facing the sport event subsector as DX expands further than adjacent markets and technologies potentially disrupting core event delivery mechanisms. The adjacent innovation theory is better applied in product line extensions and will therefore not be applied as the basis for this study (Innosabi, 2024).

3.2.3.2 Incremental innovation theory

Incremental innovation is characterised by gradual improvements to current products, processes, or services, and is effective in maintaining competitiveness and achieving sustained growth (Acemoglu, Akcigit, & Celik, 2022: 1). These improvements contribute to the efficiency, quality or functionality in an organisation (Lennerts et al., 2020: 4). Incremental innovation provides a risk mitigation strategy by allowing organisations to make manageable adjustments without the disruption associated with radical changes (Lennerts et al., 2020: 4). Learning loops are an integral concept of incremental innovation and underpin the cyclical process of continuous improvement, emphasising adaptability and learning from each iteration (Zighan & Ruel, 2023: 233). Understanding the motivators for incremental innovation such as market demands, technological advancement and internal optimisation strategies is essential for organisations that wish to adopt an incremental innovation strategy (Coccia, 2017: 2).

The historical roots of incremental innovation can be traced to total quality management (TQM) and lean manufacturing principles. Over time, methodologies such as Six Sigma and Agile have further refined and adapted these principles to different industries (Pollack, 2015: 1). Case studies, such as the Toyota production system and the evolution of software development methodologies, provide concrete examples of successful incremental innovation implementation. Another example of incremental innovation is when a company like Coca Cola introduces new flavours to their product line (Cyprusinno, 2020). These low-cost improvements help further differentiate a company from the competition while building on current offerings (Zhang, 2022: 2). Incremental innovation is the step-by-step change of something that already exists and does not consider the development of new and improved technology such as VR, AR and AI, and is therefore not suitable for the present study.

3.2.3.3 Radical innovation theory

The radical innovation theory offers insights into the transformative changes that reshape industries and societies. Radical innovation, as conceptualised by Joshi (2018: 278), involves the introduction of novel products, services, or processes that significantly alter existing market structures. One of the key principles behind radical innovation is the notion of disruptive change, where new entrants or technologies disrupt established norms, leading to the creation of entirely new markets (Christensen, 2013: 1). This theory suggests that radical innovations often emerge from environments characterised by ambiguity, uncertainty and experimentation (Richter et al., 2018: 70). The idea of "creative destruction" is central to radical innovation, emphasising the simultaneous dismantling of older systems and the creation of newer, more advanced ones (Langroodi, 2021: 67).

Radical innovation combines the power of technology with a new business model (Kennedy et al., 2017: 712). It is a concept that changes the relationship between customers and suppliers by displacing current products and services or by creating new product categories. Radical innovations, according to Lahti et al. (2021: 163) include the invention of the personal computer, cloud technology and the internet.

While radical innovations are arguably disruptive in nature, disruptive innovation refers to an idea that improves an existing market by exceeding the needs of a customer base, eventually displacing the old market whereas radical innovation destroys the current market and value network, and creates an entirely new one, as was the case with Netflix and the blockbuster video chain and is therefore not applicable (Harvard Business Review, 2015).

3.2.3.4 Disruptive innovation theory

The “Disruptive Innovation Theory” most appropriately reflects the current circumstances surrounding the sport events subsector and can be used to further understand the impact that the presence of disruptive technologies such as VR, AR and AI have on the subsector. The disruptive innovation theory suggests ways that new observations can be applied to provide insights for organisations that wish to undergo a digital transformation (Christensen, 2013: 1). Disruptive innovation and DX represent opportunities to grow in new areas for businesses with enhanced capabilities (Christensen et al., 2018: 1043). Christensen et al. (2018: 1044) define a disruption as any new threat or substantial change occurring within an industry.

Christensen proved the concept of disruptive innovation during his study of the disk drive industry and found that when innovations improved customer-valued features, established companies led the market. However, when innovations did not align with customer preferences, new companies took over while incumbents struggled or failed (Christensen et al., 2018: 1044). Disruptive innovations offer unique features that are critical for the long-term success of an organisation (Christensen et al., 2018: 1044).

Disruptive technologies are typically more affordable and easier to use than existing alternatives, with their performance gradually improving over time until they eventually penetrate and transform established markets (Christensen & Bower, 1996; Christensen et al., 2018). The step diagram in figure 3.1 illustrates the stages of disruptive innovation reflective of the nature of transformation that is occurring in the sport events subsector.

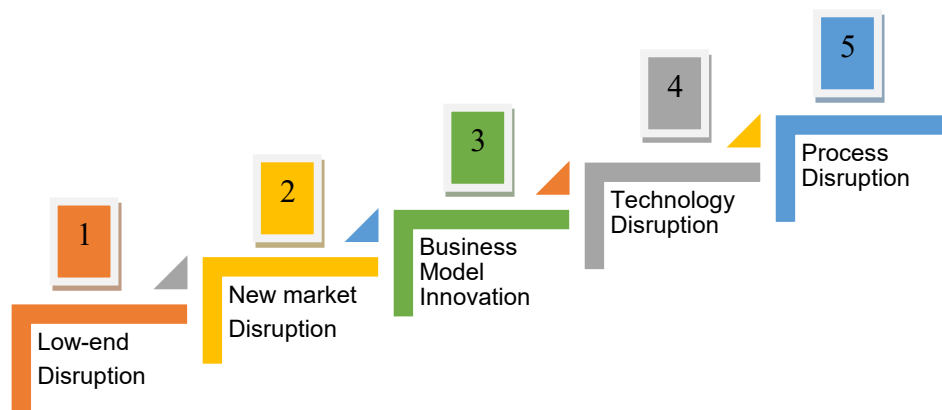


Figure 3.1: Phases of disruption

Adapted from PPC Expo (2023)

The COVID-19 pandemic accelerated DX within the sport events subsector, pushing it to technology disruption (Level 4) and into process disruption (Level 5) as outlined in Figure 3.1 (PPC Expo, 2023). Restrictions placed on gatherings and in-person events forced organisations to adopt technologies such as VR, AR and AI, in order to remain relevant. Key examples of this technological disruption include the introduction of a virtual stadium in the metaverse by Manchester City, which enabled fans to experience matches remotely through immersive digital environments (Manchester City, 2022: 1). Similarly, FIFA integrated AI-driven analytics during the 2022 World Cup to gauge spectator insights (FIFA, 2022: 1).

As digital engagement becomes more prominent, the subsector may pivot into process disruption (Level 5), requiring operational changes. The emergence of hybrid and digital-first events, such as Wimbledon’s VR live-streaming experience, illustrates how event structures have permanently evolved (All England Club, 2022). Contactless stadiums and mobile ticketing have become the standard, with venues like Wembley Stadium eliminating cash transactions to improve efficiency and security (Wembley Stadium, 2022). AI-driven solutions are now widely used for automated ticket pricing, game scheduling and personalised fan experiences (Ratten et al., 2021: 1). These advancements are potentially disrupting traditional models and are redefining how sport events are being hosted, experienced and monetised in the future.

Disruptive innovation introduces a different value proposition into the market which may not appeal to existing customers. However, the new proposition may possess attributes that are valued by new or future customers (Christensen et al., 2003). When disruptive technologies emerge, many leading firms that have been successful in excelling at sustaining innovation find themselves on the threshold of a new and harsh competition with which they are unfamiliar (O'Reilly III & Tushman, 2021). Disruptive innovation changes the rules set by established firms and force them into response. In other words, technologies such as VR, AR and AI in sport events challenges the traditional sport events model, and sport organisations must now innovate or risk the future sustainability of the sport events subsector.

The disruptive innovation model has been widely tested and used in academic research across various fields, including business and innovation studies (Hopp et al., 2018: 446). It has been applied to understand the dynamics of innovation, market competition, and the strategies of both established and emerging companies (Christensen et al., 2018: 1062). Researchers have used the disruptive innovation model to study the impact of technological advancements and innovation on markets and industries including areas such as the adoption of new technologies, open innovation and how incumbents can stay competitive in rapidly changing technological landscapes (Christensen et al., 2018: 1044). The disruptive innovation model thus provides a valuable framework for understanding how innovation and technology can reshape industries and markets, and how businesses can navigate through the challenges and opportunities that disruption presents. The following section explores some of the technological innovations that are disrupting the sport events subsector in response to the challenges arising from the COVID-19 pandemic.

3.3 TECHNOLOGICAL INNOVATIONS IN THE SPORT EVENTS SUBSECTOR

Examples of new technologies that are being introduced to the events sector include virtual reality (VR), augmented reality (AR), the use of artificial intelligence (AI) and data analytics. These innovative and disruptive technologies were sought as a result

of the impacts from the COVID-19 pandemic. While some technologies may not be entirely new, the challenges arising from the pandemic required normalising their use.

3.3.1 Virtual reality

VR, a technology that immerses users in digitally generated environments, has revolutionised various sectors, including entertainment, healthcare and education (Al-Ansi et al., 2023: 1). In recent years, the application of VR has extended to the realm of sport events, offering spectators and athletes a greater level of engagement and immersion (Wymer et al., 2021: 80). The formal definition of VR provided by Encyclopedia Britannica (2023) is a computer-generated simulation of an environment that a user can interact with, usually through specialised headsets and devices. VR aims to create an immersive and sensory-rich experience that closely replicates real-world scenarios through a combination of visual, auditory and haptic stimuli. VR has the ability to transport users into digital realms where they can engage with elements of the environment in a seemingly authentic manner.

The integration of VR into sport events has transformed the way viewers experience their favourite sport (Capasa et al., 2022: 686). Traditional methods of watching games on television or even in stadiums can be limiting, as they provide only a fixed perspective. VR technology breaks down these limitations by granting spectators the ability to virtually attend matches from various angles, replicating the feeling of being present at the venue, but with the ability to switch seats and viewpoints during the event. This heightened engagement also enhances the emotional connection fans feel towards their teams and players (Kim & Ko, 2019: 346).

VR technology is already being used in sport events in other countries. A prominent example of VR-enhanced fan engagement is the NBA's partnership with Oculus to provide VR broadcasts of games. These VR broadcasts allow fans to immerse themselves in courtside seats, experiencing the sport as if they were present. Research conducted by Li et al. (2019) found that fans who watched NBA games in VR reported significantly higher levels of presence and emotional involvement compared to traditional viewing methods.

The ability of VR to bring together geographically dispersed fans in shared virtual spaces, fostering a sense of community, offers an exciting prospect for the future of sport events. VR has emerged as a gamechanger in the world of sport events, redefining fan engagement and athlete training. The ability of VR to provide immersive experiences, enhance emotional connections and simulate realistic training scenarios has positioned itself as a transformative technology in the sport industry. With ongoing advancements and increasing accessibility, VR has the ability to reshape the way we perceive and participate in sport events, creating a more interconnected and engaging sport landscape (Barca Innovation Hub: FC Barcelona, 2023).

The advantages of virtual sport events further include a reduced carbon footprint, removal of the risks and inconveniences incurred through travel, a reduction of the amount of worktime lost through participation in the event, as well as the immediate savings on travel and accommodation costs (Neumann et al., 2018). The above-mentioned influencing factors have led to the development of new and innovative methods of staging sport events (Kokolakis, 2018: 51).

When considering innovation and the use of new technologies such as VR, acceptance and implementation can be challenging, and sport organisations are no exception. Within the sport event subsector, technology is present and everchanging across a variety of contexts from amateur to professional, on-pitch and off-pitch, and in the areas of spectator experience and consumption (Ratten, 2018: 35). For decades, sports have engaged with new technologies and in turn have experienced change in both organisation and competition (Mallen, 2019: 1).

VR has proven to be a useful innovation on many fronts. Evidence suggests that VR is highly effective in changing attitudes, increasing empathy and fostering a greater sense of appreciation for diversity in society, even at the unconscious level through immersive, rich and isolated experiences (Bailenson, 2018: 10). However, previous research suggests that despite the advantages of sport technology, some sport organisations are reluctant to adopt VR technology (Yong & Arya, 2023: 1). Further research is needed to understand the perceptions of innovation and the challenges of implementing innovations such as VR. In addition to VR, AR can transform sport events, and it is discussed in the next subsection.

3.3.2 Augmented reality

AR, a technology that overlays digital information in the real-world environment, has gained popularity across various industries (Caboni & Hagberg, 2019: 1125). In the sport events subsector, AR offers a unique blend of physical and digital experiences that complement the VR experience, by further enhancing spectator engagement and providing athletes with innovative training tools. AR refers to the integration of digital content, such as images, sounds and text into the user's real-world environment (Farshid et al., 2018: 657). Unlike VR, which immerses users in entirely digital worlds, AR enhances the user's perception of reality by adding layers of information that can be interacted with. AR is often experienced through devices such as smartphones, tablets and AR glasses, which provide real-time visual overlays onto the user's physical surroundings. Holograms are a common example of AR.

AR is able to transform sport events by offering spectators a more enriched and interactive viewing experience (Ráthonyi et al., 2018: 90). Dedicated mobile apps or AR glasses enable spectators to access real-time statistics, player information and interactive graphics during events by simply pointing their devices at a player on the field and receiving instant statistics, performance metrics and even historical data about the player's career.

The collaboration between the NFL and Microsoft to develop the "HoloLens" headset is a notable example of AR-enhanced fan engagement. The headset allows fans to view holographic replays of key moments from different angles, providing an immersive and interactive way to relive game-changing plays (Microsoft, 2023). This innovation deepens fans' understanding of the game and intensifies their connection to the sport (Fisher, 2018: 2).

AR has also optimised athlete training and performance by providing athletes with real-time data overlays during practice sessions, allowing them to analyse their form, positioning and other critical factors. The ability to visualise this data in real-world contexts allows athletes to make adjustments, leading to more effective training outcomes (Ng et al., 2019: 278). An example of AR-enhanced athlete training is the use of smart glasses that display real-time biometric data, such as heart rate and

muscle activity, directly within an athlete's field of view which enables athletes and coaches to make informed decisions about training intensity and recovery strategies, ultimately leading to enhanced performance (Baca et al., 2020).

AR systems can be used as a tool for designing new sport forms. Sport and AR technology were combined to create “Hado,” and a new sport category called “Techno Sport” in which virtual energetic balls are thrown with real movements to target opponents (Hado-sport, 2023).

A merge of AR and live sport broadcasting may also lead to a better comprehension of sport events (Goldman & Hedlund, 2020: 370). AR can be used to provide match summaries, analysis and referee assistance to live sport events from a single moving camera. Such tools can help coaches and players generate individual profiles of the players, and teammates’ coordination, and better evaluate physical and tactical performances (Goebert et al., 2022: 2). AR platforms provide collaborative training, and social features to create, share and communicate goals and challenges for participants. The next section explores the introduction of AI and data analytics in sport events.

3.3.3 Artificial intelligence and data analytics

The integration of artificial intelligence (AI) and data analytics into the world of sport events has ushered in a new era of performance optimisation, fan engagement and strategic decision-making (Agarwal et al., 2022: 1). These technologies offer insights and solutions that were previously unimaginable, changing the way athletes train, teams compete and how spectators experience sport events. AI refers to the simulation of human intelligence in machines, enabling them to learn, reason and make decisions (Udo-Assang, 2025: 452). In the context of sport, AI algorithms can analyse large datasets to identify patterns, predict outcomes and suggest optimal strategies (Sheng et al., 2021: 1170).

Spectator interactions with social media, online platforms and streaming services generate vast amounts of data. AI algorithms can analyse this data to understand individual preferences, sentiment and engagement patterns. This information can then

be used to tailor content, offer personalised experiences and increase spectator involvement (Mahajan et al., 2023: 122). The integration of AI-powered chatbots in sport apps and websites is a notable example. Chatbots can provide real-time updates, answer fan queries and even engage in personalised conversations thereby enhancing fan experience and providing instant access to information, fostering a deeper connection between fans and the sport community (Krishna et al., 2022: 2019).

AI and data analytics have significantly impacted strategic decision-making for teams and coaches (Glebova et al., 2025: 1). AI algorithms have the ability to provide insights into opponent strategies, player performance trends, and optimal in-game decisions by analysing historical and real-time data. This data-driven approach to decision-making has given teams a competitive edge on the field. Coaches are able to make informed decisions based on data-driven insights, leading to more successful plays and match outcomes (Tian et al., 2019: 3).

The integration of AI and data analytics enables data-driven insights that enhance athlete performance, revolutionise fan experiences and optimise strategic decisions. As AI algorithms become more advanced and data analytics methods more refined, the sports sector is positioned to continually innovate and evolve, creating a more dynamic and engaging environment for all stakeholders.

During the COVID-19 pandemic, the use of AI enhanced live stream by recreating the viewership experience (Poongodi et al., 2021: 97906). Dwivedi et al. (2022: 14) noted that viewers are swiftly adapting to watching two screens at the same time, with the main screen being used to watch matches and the other being used to interact with other people or search for statistics and results, and this concept should be incorporated when planning future events. Baxter (2022: 10) notes that some leagues choose virtual venues by installing screens and speakers to create an attractive gaming environment (noise, shouts, faces of emotions, reactions, emotions, etc.).

The digitisation of sport events and technological innovations in sport media offer disruptive new ways to adapt sponsor messages to real-time events during live broadcasts (Mardosaite & Jasinskis, 2022: 95). Given the availability of big data and the huge trend of watching sport via online streaming platforms, it has become feasible

to tailor sponsor messages to both the viewers' dispositions and the event context (Breuer et al., 2021: 309). For example, a brand could present distinct sponsor messages at different times to soccer fans who support opposing teams.

As with the introduction of new and transformational possibilities for any sector, there are factors that present potential barriers to digital transformation, and the sport events subsector is no exception. The next section discusses the possible barriers to digital transformation.

3.4 POSSIBLE BARRIERS TO DX

In contrast to drivers of innovation, innovation barriers are the factors that 'impede, delay, or completely block DX (Hueske & Guenther, 2015: 113). Furthermore, a lack of applicable resources could hamper an organisation's capabilities for innovation or be a significant motivator (Hueske & Guenther, 2015: 114). Knowledge and skills limitations as well as costs involved are major barriers for the digital transformation of the sport events subsector.

Managers and employees who are resistant to change can hinder innovation (Lašáková et al., 2017: 70). Furthermore, an innovation that does not align with an organisation's culture and operational strategy can reduce the overall effectiveness of the organisation (Büschgens et al., 2013: 763; Naqshbandi & Kamel, 2017: 5). A digital transformation of the sport event subsector challenges the traditional sport events model and may not be easily accepted by supporters. Acceptance of technology, learning curve of staff, cost of adequate training of staff and time allocations, bandwidth of computer equipment, security and privacy, buy-in from management and stakeholders, and cost of outsourcing expertise are all factors that were identified from the literature as potential barriers to digital transformation (Trenerry et al., 2021)

While the benefits of VR in sport events are substantial, challenges such as the cost of equipment, motion sickness and the need for tailored content remain (Simón-Vicente et al., 2022). As technology advances and becomes more accessible, these challenges are likely to be mitigated. AR faces challenges similar to those of VR, including device accessibility, content creation and user experience optimisation (Qiao

et al., 2019: 655). However, AR's ability to seamlessly integrate digital content into the real world gives it a distinct advantage, making it more suitable for certain sport applications. As AR technology advances, its potential to revolutionise and enhance viewer experiences and athlete training becomes more promising. The potential of AI and data analytics in sport is immense, but challenges such as data privacy, algorithm bias and the need for robust AI models persist (Niemi, 2021: 1). As technology evolves and more sophisticated AI-driven solutions that enhance both athlete performance and fan engagement arise, addressing these challenges becomes crucial (Light et al., 2019: 1).

3.5 SUMMARY

This chapter has explored the nature of DX and innovation, the drivers of innovation with special attention to technology as a driver of innovation, and the possible technological interventions such as VR, AR, AI and data analytics that can be implemented to assist in the future sustainability of the sport events subsector. Used as the theoretical basis for the study, Christensen's Disruptive Innovation Theory provided a deeper understanding of the impact of disruptive technologies on the sport events subsector. The potential barriers to digital transformation of the sport events subsector were highlighted from the literature. The next chapter provides a detailed explanation of the research methodology for this study.

CHAPTER FOUR: RESEARCH METHODOLOGY

4.1 INTRODUCTION

Given that the aim of this study is to explore the SACIA member's perceptions of the sustainability of the sport events subsector through digital transformation in response to the challenges resulting from the COVID-19 pandemic, this chapter outlines the systematic design and execution of the study to ensure the reliability and validity of the research findings known as the research methodology. The chosen methodology aligns with the nature of the study, providing a transparent and comprehensive account of the data collection method, sampling techniques and analytical tools that were employed in the research process. The ethical considerations and limitations of the chosen approach are also addressed to enhance the transparency and rigor of the study. Chapter Four opens with Saunders, Lewis and Thornhill's Research Onion as the framework used for guiding the research design and methodology of the study.

4.2 SAUNDERS, LEWIS AND THORNHILL'S RESEARCH ONION

A sound research methodology requires a meticulous and well-structured approach to the construction and design of the research process (Melnikovas, 2018: 30). To navigate the complexities in creating a robust methodology, a conceptual framework known as Saunders, Lewis and Thornhill's Research Onion was used. The authors used the metaphor of an onion to capture the layered nature of research design thereby offering a comprehensive and systematic guide for researchers, as they 'peel' back each layer of the onion in the pursuit of a well-grounded and methodologically sound study (Saunders & Tosey, 2013: 58). Figure 4.1 shows the layers of research design.

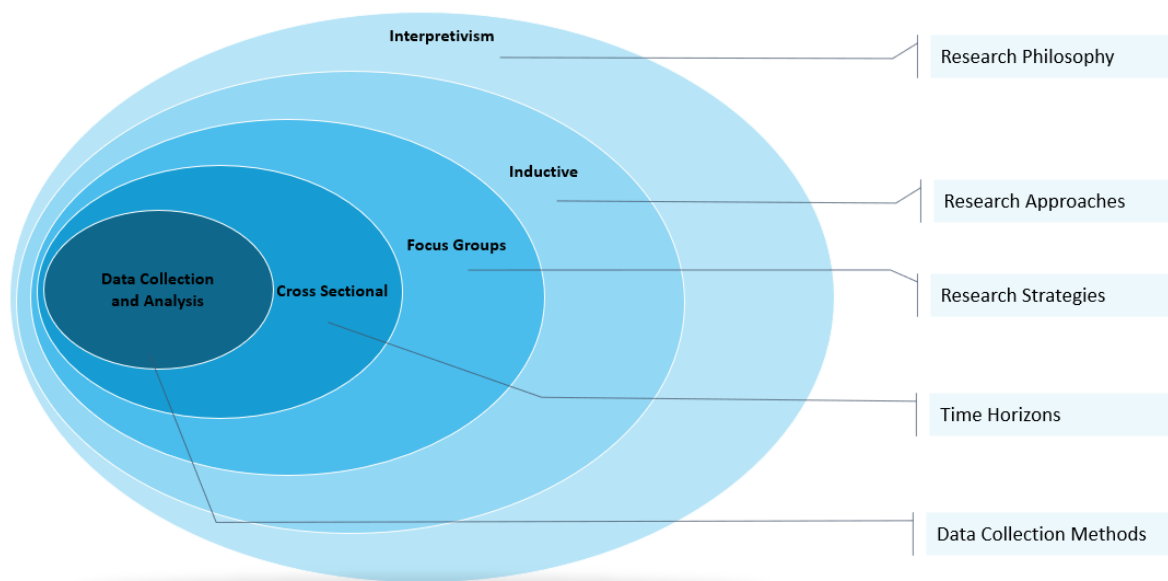


Figure 4.1: Saunders Lewis and Thornhill's research onion

Adapted from Saunders, Lewis and Thornhill (2019: 2)

Each layer of the onion represents a different stage of the research process. Beginning with the outermost layer, researchers consider various research philosophies, selecting from paradigms such as positivism, interpretivism or realism. The second outermost layer is the selection of a research approach and involves deciding between deductive, inductive and abductive reasoning. Critically examining the onion, methodological choices pertaining to the selection of specific methods to gather and analyse the data are chosen, exposing various options for research strategies such as surveys, interviews, experiments or case studies (Saunders & Tosey, 2013: 59). Moving further inward, the temporal scope of the study is revealed as either cross-sectional or longitudinal before researchers are confronted with the practicalities of data collection, selecting specific tools and techniques. Finally, the innermost layer reveals the analytical methods employed to make sense of the data that was gathered. Saunders, Lewis and Thornhill's Research Onion serve as a roadmap to guide researchers through the intricacies of methodological decision-making and also helps to ensure an efficient and well-justified research design was achieved (Saunders et al., 2019: 161). The use of this framework allows researchers to navigate through each of the layers and make informed decisions at each stage (Maguire, 2021: 24). The choice of research philosophy, methodology, data collection instruments and

analytical tools becomes a conscious and purposeful process, aligning with the unique requirements of the research question. Overall, this framework encourages a holistic approach and emphasises the interconnectedness of the various elements within the research process (Williamson & Johanson, 2017: 10).

The following sections of this chapter explain the research design and methodology as well as the reasons behind the methodological choices at every stage, and the alignment of the chosen approach with the research objectives of the study.

4.2.1 Research philosophy

Research philosophy forms the cornerstone of any academic inquiry, shaping the approach, methods and interpretations that underpin the study (Williamson & Johanson, 2017: 5). Saunders, Lewis, and Thornhill (2019: 2) present a connection between research philosophies and the key elements of ontology, epistemology and axiology. Rooney (2016: 80) provides a guide for researchers by defining the concepts of ontology, epistemology and axiology.

Ontology, defining the nature of reality, reflects in the chosen philosophy's stance on the existence of an objective or subjective reality (Saunders, Lewis & Thornhill, 2019:131). This study adopts a relativist ontology, recognising that reality is socially constructed and shaped by the individual experiences and perceptions of SACIA members.

Epistemology, governing the nature of knowledge, correlates with how the researcher perceives knowledge acquisition, whether it is through empirical observation, subjective interpretation or a blend of both (Leedy & Omrod, 2020: 10). This research follows an interpretivist epistemology, emphasising subjective understanding and co-construction of meaning between the researcher and participants regarding digital transformation and sustainability in sport events.

Axiology, the study of values, is inherent in the researcher's approach, emphasising the importance of acknowledging the role of values in shaping the research process (Creswell & Poth, 2018: 20). The present study acknowledges the value-laden nature

of research, where the researcher's values and ethical considerations are integral to the inquiry, particularly in interpreting participants' lived experiences during the COVID-19 pandemic.

The above foundational elements lead the way to different research paradigms, such as positivism, interpretivism and realism, each representing distinct philosophies that influence researchers' ontological, epistemological and axiological orientations.

Three primary paradigms, which are positivism, realism and interpretivism are commonly known to guide research. Positivism is rooted in scientific methodology and theorises that knowledge is objective, observable, and measurable (Alakwe, 2017: 38). The positivist paradigm excels in structured environments, its limitations lie in oversimplifying complex social phenomena, neglecting the context, and potentially reducing human experiences to numerical data (Harrison et al., 2017: 7). Realism lies between the spectrum of positivism and interpretivism research philosophies and contends that reality exists independently of human perception but acknowledges the role of interpretation in understanding this reality (Mingers & Standing, 2017: 173). Although realism embraces a more flexible stance than positivism, it may still fall short in capturing the depth and richness of subjective experiences (Buch-Hansen & Nielsen, 2020: 1711). In contrast to both positivism and realism paradigms, interpretivism stands out in the case of the present study, for its emphasis on understanding and interpreting the subjective meanings that individuals attach to their experiences (Putnam & Banghart, 2017: 117). Based on the philosophy that reality is socially constructed, interpretivism recognises the importance of context, culture, and individual perspectives. Interpretivism embraces subjectivity and is particularly suited for studies that aim to explore complex social phenomena, where human interactions and meanings are a central focus (Pulla & Carter, 2018: 9). Qualitative methods such as interviews, observations, and content analysis are favoured within an interpretive paradigm as it allows researchers to explore the depth and detail of human experiences (Denscombe, 2017: 6).

Interpretivism best aligns with the study's objectives as it recognises the inherent subjectivity of human experiences. By employing qualitative methods, such as in-depth interviews and thematic analysis, interpretivism captures the multifaceted

aspects of SACIA members' perceptions. Interpretivism allows for the exploration of context-specific meanings (Pervin & Mokhtar, 2022: 426), and offers a well-rounded view of the interplay between the members' perceptions and the digital transformation of the sport events subsector. The dynamic nature of the research problem calls for a paradigm that not only acknowledges the diverse perspectives of participants but also values the context in which these perspectives are set. The choice of research philosophy is a critical decision that shapes the entire research process (Saunders & Tosey, 2013: 2). Interpretivism, with its commitment to contextual understanding and participant voices, emerged as the most appropriate and enriching philosophy for guiding the study. Table 4.1 Highlights the key differences between positivism, realism and interpretivism research philosophies based on the specific purpose of the research.

Table 4.1: Differences between research philosophies

Positivism	Realism	Interpretivism
Laboratory experiments and survey research	Quasi experimental research designs are common	Action research and ethnography
Aimed at theory or hypothesis testing	Aims to understand the external world while considering human influence	Aimed at theory-building
Employ deductive approach	Mostly abductive but can be inductive	Employs inductive approach
Uses predominantly quantitative data	Uses mixed methods to gather data	Relies heavily on qualitative data

Source: Nayak and Singh (2021: 66)

Having established a firm foundation in the chosen interpretive philosophy for the research, the next step involves selecting a research approach that carefully translates the above philosophical underpinning into a practical framework to shape the trajectory of the research.

4.2.2 Research approach

Three fundamental approaches, induction, deduction and abduction guide the process of drawing inferences and forming conclusions from the study (Kennedy & Thornberg, 2018: 49). Induction involves deriving general principles from specific observations, offering insights into patterns and theories based on empirical data. Deduction entails the derivation of specific predictions from general principles or hypotheses that form the basis for empirical testing. Abduction involves crafting the most plausible explanation for observed phenomena and is particularly useful in generating hypotheses for further exploration (Folger & Stein, 2017: 307).

According to Ragab and Arisha (2018: 7), the foundations of research design comprise descriptive, exploratory and explanatory frameworks. Descriptive research captures the essence of a population or phenomenon without manipulating variables and employs methods such as surveys and observational studies. Exploratory research pays attention to new topics, generating insights through literature reviews, interviews and focus groups. Finally, explanatory research seeks to unravel causal relationships between variables by employing experimental designs to test hypotheses and provide a greater understanding of studied phenomena. These approaches and designs combined assist the researcher to navigate the complexities of inquiry in the context of the study.

For exploratory research in a qualitative study using focus groups, the most suitable approach is inductive reasoning, as it involves deriving general principles or theories from specific observations. In the context of focus groups, where the aim is to explore new topics and generate insights, an inductive approach allows for an open and flexible exploration of participants' perspectives (Azungah, 2018: 393). Inductive reasoning enables the emergence of themes, patterns and insights from participants' experiences and viewpoints through interactive discussions within the focus group setting (McAbee et al., 2017: 278). An inductive approach most appropriately aligns with the explorative nature of this study, providing a rich foundation for understanding the complexities of SACIA members' perception.

4.2.3 Methodological choice

Quantitative, qualitative and mixed-method research approaches represent three distinct methodologies, each with a unique set of strengths and characteristics (Fleming & Zegwaard, 2018: 212).

Quantitative research is characterised by an emphasis on numerical data, statistical analysis, and objectivity, seeking to uncover patterns, relationships and generalisability within a larger population (Mohajan, 2020: 51). Common methods employed during quantitative studies include surveys, experiments and structured observations (Ahmad et al., 2019: 2828). While quantitative research provides statistical rigor and allows for generalisable findings, it is limited when a study aims to explore the subjective and contextual dimensions of human experiences (Queirós et al., 2017:370).

Mixed method research refers to a combination of both qualitative and quantitative research methods within a single study. The mixed method approach involves collecting, analysing and integrating both numerical and non-numerical data to gain a more comprehensive understanding of the research question. According to Creswell and Creswell (2017: 203), mixed method research is employed when researchers seek to capitalise on the strengths of both qualitative and quantitative methods, aiming to provide a more complete view of the phenomenon under investigation. This approach is particularly useful in situations where a singular method might not fully capture the complexity of the research question and pose the opportunity for researchers to triangulate findings, enhance validity and generate a robust interpretation of the study's outcomes (Turner et al., 2017: 244).

A qualitative research approach emerges as the most appropriate and suitable method for the present study. Qualitative research embraces an interpretive approach as it seeks to understand the depth and complexity of human experiences, emphasising context, meaning and the social construction of reality (Basias & Pollalis, 2018: 98). Qualitative studies commonly employ methods such as interviews, focus groups and content analysis (Roller, 2019: 1). Qualitative research also excels in providing rich, in-depth insights into individuals' perspectives and allows researchers to explore the

intricacies of social phenomena (Ahmad et al., 2019: 2828). The flexible and adaptive nature of qualitative research makes it particularly well-suited for studies aiming to explore multi-layered and complex situations such as human perceptions.

For this research, a qualitative research approach is more suitable than other methodological choices as it goes beyond numerical data points and aligns with the research objectives that seek to uncover depth and contextual influences surrounding the DX of the sport events subsector. Qualitative research allows for richer data and a more comprehensive understanding (Yates & Leggett, 2016: 225). By selecting a qualitative research approach, this study aims not only to answer "what" but, more importantly, to uncover the "how" and "why" behind the SACIA member's perceptions.

After justifying the qualitative research approach for the study, the next step is to create a research strategy that aligns with both the philosophy and the qualitative nature of the study to ensure a cohesive and methodologically sound progression through the layers of the research onion.

4.2.4 Research strategy

Qualitative research encompasses a range of strategies that offer unique advantages in exploring complex phenomena. Common qualitative research strategies include in-depth interviews, case studies, observations and focus groups (Moser & Korstjens, 2017: 9). While each strategy has its advantages, the choice depends on the research question, the context and the objectives of the study. Bekwa et al. (2019: 114) differentiate between the aforementioned qualitative research strategies as follows: in-depth interviews involve one-on-one conversations between the researcher and the participant, allowing for a detailed exploration of individual perspectives and experiences while case studies are centred on an in-depth examination of a single case to provide a more complete understanding of a particular phenomenon or situation. Observational research involves systematically watching and recording participants' behaviour in a natural setting to gain insights into their actions and interactions.

Focus groups are a form of facilitated discussion with the aim of fostering dynamic interactions within the group and the exploration of shared perspectives (Barbour, 2021: 22). Focus group research involves bringing together a small group of subjects, typically 6 to 10 participants, at one location, and having them discuss a phenomenon of interest for a period of approximately 30 to 90 minutes (Williams et al., 2020: 2). The discussion is moderated and led by a facilitator, who sets the agenda and poses an initial set of questions for participants, makes sure that ideas and experiences of all participants are represented, and attempts to build an understanding of the problem or situation based on the participants' comments and experiences. Focus groups are not generally used for explanatory or descriptive research but are more suited for exploratory research (Nayak & Singh, 2021: 66).

The selection of online focus groups as the research strategy for this study is grounded in several reasons: firstly, online focus groups provide a virtual platform for participants to engage in discussions, overcoming geographical constraints and promoting inclusivity (Stewart & Shamdasani, 2017: 52). In addition, focus groups were selected to capture group dynamics, shared perspectives and richer discussion among participants, which would not have been possible through one-on-one interviews alone (Chand, 2025: 15). Conducting focus groups through online platforms such as Microsoft Teams is more cost effective than having to book a venue/boardroom. For qualitative research, a smaller sample of approximately thirty interviews needs to be conducted (Vasileiou et al., 2018: 3). The required sample size was achieved in a less costly and less time-consuming manner by conducting four focus groups comprising of up to 6 participants each. Each focus group session lasted for a duration of sixty minutes and was recorded so that the researcher could verify responses, at a later stage, while still maintaining attention during the session. Online focus groups avoid the distraction of making notes during the session and allow active facilitation by the researcher, sharing of presentations and question guides, thereby maintaining order during the session (Carey & Asbury, 2016: 17).

Examining time horizons is important to ensure a cohesive and structured timeline for the execution of the online focus groups thereby enhancing the overall methodological rigor of the research study.

4.2.5 Time horizon

In qualitative research, particularly within the context of focus groups, various time horizons can be adopted to structure the study. The two primary time horizons that were considered for the study are cross-sectional and longitudinal time horizons. According to Al-Ababneh (2020: 89), a cross-sectional approach is designed to obtain data from different contexts at the same time. In this time horizon, data is collected just once over a short period of time, whereas a longitudinal approach aims to investigate the dynamics of a problem continuously for several times. A longitudinal approach allows researchers to investigate the changes related to problem being researched over the time and is often related to a positivist paradigm (Al-Ababneh, 2020: 89). A cross-sectional approach was therefore chosen for this research as it involves the collection of data from participants at a single point in time, providing a 'snapshot' of their experiences, perceptions and attitudes within that specific timeframe (Wang & Cheng, 2020: 565). The decision to employ a cross-sectional approach in this study is driven by the immediate nature of the research questions and the aim to capture a comprehensive snapshot of SACIA members' perceptions of the DX of the sport events subsector. Given that the study seeks to explore diverse viewpoints at a specific moment, a cross-sectional design is well-suited to efficiently gather rich and varied insights without the extended timeline required by a longitudinal study. The cross-sectional approach aligns with the research objectives and allows for a timely exploration of the dynamic and evolving nature of human perceptions within the defined scope of the study.

4.2.6 Data collection instrument

Within the layers of Saunders, Lewis and Thornhill's research onion, the choice of a data collection instrument significantly impacts the quality and depth of insights gained during research (Moser & Korstjens, 2017: 12). Qualitative research employs various data collection instruments, each serving a unique purpose in understanding the diverse aspects of the research in question (Hennink et al., 2020: 88). During the focus groups discussion, a comprehensive question guide that is based on the objectives of the study was used as an effective data collection instrument that was well refined and adjusted accordingly. The question guide (See Appendix D) included semi- structured questions designed to explore participants' experiences, perceptions and attitudes

regarding the DX of the sport events subsector as a means of sustainability in response to the challenges resulting from the COVID-19 pandemic.

The next step is to discuss the selection and definition of the study's population, sample selection and sample size, and highlight how the use of online focus groups can effectively capture a variety of perspectives within the chosen demographic.

4.2.6.1 Population

Population or universe according to Pandey and Pandey (2021: 41) refers to the entire mass of observations, which is the parent group from which a sample is drawn. The term population or universe conveys a different meaning than a traditional one. In census survey, the count of individuals (men, women and children) is known as population. The target population refers to all the members of a real or hypothetical set of people, events or objects to which they wish to generalise the results of a research study (Pandey & Pandey, 2021: 41). Defining the population in a research study entails establishing the group of individuals or elements sharing common characteristics relevant to the present research (Shukla, 2020: 1). The rationale behind population selection must be justified based on the relevance to the study objectives. It is crucial to acknowledge diversity within the population and recognise variations in individual experiences and perspectives (Shukla, 2020: 2). The defined population guides subsequent decisions on sampling, data collection and analysis by balancing inclusivity with the practical feasibility of the study. A well-defined population enhances the study's validity and relevance, thereby contributing to its impact in both academic and practical contexts (Campbell et al., 2020: 657).

For this study, the target population are all the members of SACIA. SACIA has over five hundred members participating in three special interest groups, namely the broadcast industry group, the Professional audio-visual (Pro-AV) forum and the Technical Production and Services Association (TPSA) (SACIA, 2023). The sample for inclusion was drawn from all three special interest groups as the members of these groups are involved in various area relating to sport events.

After defining the target population of the study, the focus shifts to the selection and definition of a representative sample, a pivotal step that ensures the study's findings can be effectively generalised from the identified population to the subset under examination.

4.2.6.2 Sample

The process of sample selection is an important stage in research methodology that influences the validity and generalisability of study findings. Researchers may employ various sampling techniques, broadly classified into probability and non-probability sampling methods, to strategically gather representative subsets from the larger population. Probability sampling is characterised by random selection and ensures each element in the population has an equal chance of being included, thereby fostering greater statistical rigor (Denscombe, 2017: 34). Conversely, non-probability sampling involves the purposeful selection of a subset based on predetermined criteria which offers flexibility but requires careful consideration of potential bias (Denscombe, 2017: 34). Table 4.2 explains the differences between the two broader sampling categories.

Table 4.2: Differences between probability and non-probability sampling

	Probability Sampling	Non-Probability Sampling
1.	Used to generalise results	Findings cannot be generalised
2.	Refers to the sample as well as the population	Has free distribution
3.	Members of the population has equal chance of being selected	Participants are selected on qualifying criteria
4.	Data can be used for inferential purposes	Non-inferential and non-parametric

Source: Adapted from Pandey and Pandey (2021: 47)

Various sampling methods exist within the broader probability and non-probability sampling categories which are identified in Table 4.3

Table 4.3: Sampling methods

Probability sampling methods	Non-probability sampling methods
Random	Convenience
Systematic	Snowball
Stratified	Purposive
Cluster	Quota

Source: Adapted from Pandey and Pandey (2021: 47)

Convenience sampling techniques, although convenient, may result in a biased sample (Jager et al., 2017: 14), as individuals that are easily accessible to the researcher may not represent the broader spectrum of perspectives within SACIA and the sport events subsector. Quota sampling involves selecting participants based on predetermined quotas, but it might not capture the variety of experiences crucial for understanding the multifaceted aspects of sustainability within the subsector (Sharma, 2017: 750). Snowball sampling, although effective in reaching interconnected networks, may lead to a homogenous sample, lacking diverse viewpoints essential for a comprehensive exploration (Heckathorn & Cameron, 2017: 113). Purposive sampling is a deliberate and non-random selection method that is employed to gather a sample that specifically meets the research objectives (Campbell et al., 2020: 654). Purposive sampling best aligns with the research objectives as it allows for the intentional selection of participants who possess specific characteristics or experiences relevant to the study's focus, such as SACIA members who are actively involved in the sport events subsector and will be affected by DX. Given the exploratory nature of the study, purposive sampling enables the selection of participants with diverse perspectives and ensures a comprehensive exploration of member perceptions and experiences related to DX and sustainability.

While other non-probability sampling methods may serve specific purposes, they do not align optimally with the objectives of this study. Purposive sampling therefore emerged as the most suitable approach for exploring member perceptions of sustainability in the sport events subsector through DX in response to the challenges resulting from the COVID-19 pandemic.

The selection criteria for inclusion and exclusion play an important role in shaping the composition of this purposively chosen sample (Patino & Ferreira, 2018: 84). Inclusion criteria establish characteristics or attributes that individuals must possess to be considered for the study. These criteria are directly tied to the research questions and objectives such as the required professional background or expertise. Criteria for inclusion for this study are members of SACIA that are actively involved in the sport events subsector. Equally important are exclusion criteria, which define characteristics that disqualify individuals from participating in the online focus group. These include factors that could potentially confound the research findings or diverge from the specific focus of the study (Patino & Ferreira, 2018: 84). For example, if the research is based around a specific age group, individuals outside that range may be excluded. For this study, only individuals between the ages of 18 and 65 years old may be selected to participate in the focus groups. The criteria for inclusion and exclusion are fundamentally tied to the research objectives to ensure that the selected sample aligns with the study's purpose. It is important to construct a sample with the relevant knowledge and experience that can provide meaningful insights into the research questions. Recruitment for the online focus groups were conducted through targeted invitations to allow for a diversity in perspectives and experiences as well as ensuring that the criteria for inclusion and exclusion were met.

4.2.6.3 Sample size

Selecting an appropriate sample size for qualitative research is a challenging task, as the goal is to select a sample that will yield rich data to understand the phenomenon studied. Sample sizes may vary significantly depending on the characteristics of each study. Saturation is the most common guiding principle to assess the adequacy of data for a purposive sample form of qualitative rigor. Data saturation or thematic saturation refers to the point in data collection when issues begin to be repeated and further data collection becomes redundant (Hennink et al., 2019: 483).

Boddy (2016: 429) recommends a sample of 20-30 individuals. Sample size in qualitative research is not predetermined and depends on the complexity of the research topic, the diversity of the sample and the richness of the data collected. Researchers should continually assess saturation during data collection and stop

when they believe that additional participants will not contribute substantially to the understanding of the phenomenon under investigation. A sample of 30 participants was initially targeted based on the total population of 220 SACIA members (SACIA, 2023). The sample was further divided into focus groups of six participants each to allow for effective facilitation of the group and to remain within the allocated time limit for each of the focus group sessions. While all 30 participants were invited to the focus group sessions, unexpected cancellations and unannounced absences resulted in groups consisting of between three and five participants. Saturation was achieved after four sessions and a total sample of 16 participants.

It is important to note that smaller sample sizes are common in qualitative research compared to quantitative studies, as the emphasis lies in the depth and richness of information rather than statistical generalisation. The key is to achieve a balance where the sample is large enough to capture diverse perspectives but small enough to facilitate an in-depth exploration of individual experiences and insights (Sim et al., 2018: 622).

After gathering raw data from the focus group sessions, the next step was to clean the data and anonymise participant details. The names of participants were replaced with pseudonyms (participant 1, 2, 3...) before being uploaded to qualitative data analysis software (QDAS), ATLAS.ti, for further sorting and analysis. The use of QDAS was compared with the manual data analysis process and was found to have several benefits such as time saving, consistency, easy data management and enhanced visualisation techniques over manual coding. ATLAS.ti is a software that helps organise and interpret the data, allowing for a deeper understanding of the participants' perspectives and enriching the overall findings of the study.

4.2.6.4 Data analysis

ATLAS.ti is a qualitative data analysis software that facilitates systematic coding, organisation and analysis of textual data such as the transcripts from in-depth interviews and focus groups. The software allows for the systematic management of large datasets, ensuring a streamlined coding process (Bryda & Costa, 2023: 1). The selection of ATLAS.ti was based on the accessibility of the software provided to

students at the University of South Africa, the costs involved in obtaining licenses and permissions to use the software, and the experience that fellow researchers at the institution may have previously used the software. ATLAS.ti enables the exploration of relationships and connections between codes, categories and overarching themes/memos (Frieze et al., 2018: 18). The main purpose of the data analysis stage is to derive a deeper understanding of the participants' perceptions, experiences and attitudes.

Once the transcripts were cleaned and imported to ATLAS.ti, the data were organised for an efficient analysis process to follow. Each segment of text associated with a specific theme was systematically coded within the software. Codes belonging to the broader categories based on the study objectives were applied to relevant passages, facilitating a comprehensive and organised overview of the emerging patterns. Through the process of thematic analysis, patterns and connections within the data were identified. This involved recognising recurring ideas, divergent perspectives and responses pertaining to the DX and sustainability of the sport events subsector.

To ensure reliability, a second researcher/supervisor was present during the coding of certain segments of the data and conducted reliability checks to enhance the robustness of the analysis (Nowell et al., 2017: 3).

The final step of the data analysis process was the synthesis and generation of a comprehensive report, presenting the identified themes, patterns and insights. The report was structured to communicate the richness and depth of participant perspectives on sustainability in the sport events subsector.

The meticulous process described above using ATLAS.ti, ensured an organised and rigorous exploration of online focus group data, offering a deeper understanding of member perceptions in response to the dynamic interplay of DX and the challenges resulting from the COVID-19 pandemic.

4.3 THE DATA ANALYSIS PROCESS

To make sense of the data that was gathered, a systematic process moving through various stages to ensure data quality, clarity and actionable insights was applied. Each step in the data analysis process is critical in transforming the raw data into a cohesive narrative that ultimately addresses the study's objectives (Nasheeda et al., 2019: 3).

4.3.1 Reflection on the data analysis process

Reflecting on the data analysis process provided an opportunity to assess the methods used, the challenges encountered and how these challenges were addressed. A qualitative approach was adopted, specifically inductive thematic analysis, to identify patterns and themes. Braun and Clarke (2022:3) emphasise the importance of reflection in thematic analysis, as it refines understanding and rigor of the study.

Figure 4.2 illustrates the stages of the analysis from initial data gathering to the final narrative.

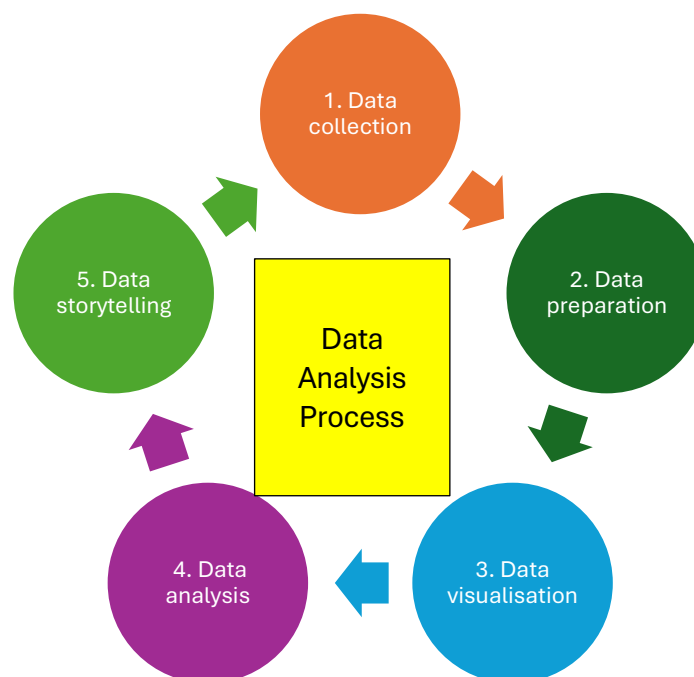


Figure 4.2: Illustration of the data analysis process

Source: Author's compilation

4.3.1 Data collection

As explained earlier in the chapter, data was collected through focus groups conducted with the members of SACIA. This method was chosen to gain an in-depth perspective of digital transformation in the sport events subsector. Johnstone (2017:67) confirms that focus groups are effective in capturing rich contextual data.

4.3.2 Data preparation (cleaning, sorting and arranging)

After collection, the data was prepared by cleaning, sorting and arranging the transcripts. This step involved checking for transcription accuracy, anonymising personal identifiers and individually assigning codes which were later grouped into themes. Creswell (2013) emphasises that data preparation is crucial for maintaining integrity and accuracy in qualitative analysis.

4.3.3 Data visualisation

The data is then presented visually using charts and maps to depict the frequency of themes. Ligita et al (2022:126) highlight the importance of data visualisation as a tool for clarifying relationships within qualitative data.

4.3.4 Data analysis

Inductive thematic analysis was used to systematically code the data and identify key themes. Codes were grouped into larger categories called subthemes each belonging to one of the four major themes that emerged, creating a structured thematic framework. Braun and Clarke's (2006: 6) six-step framework for thematic analysis provide a foundation for systematically identifying themes.

4.3.5 Data storytelling (explained with a story so that it is useful and actionable)

The final step involved creating a narrative that presents the findings in a relatable and actionable format. Data storytelling transforms raw insights into a story that connects with both scholars and industry professionals making the findings more tangible.

Duarte (2020: 11) explains that storytelling helps translate data into narratives that are both memorable and impactful.

4.4 PILOT TEST

A sample consisting of four SACIA members was purposively selected to participate in a pilot focus group two weeks prior to the commencement of the actual research. The sample included individuals that possessed similar attributes to those that were targeted for the main study, which were members of SACIA between the ages of 18 to 65 years old and involved in the sport events subsector. The objective of the pilot group was to test the soundness of the proposed methodology, the efficiency of the technology to be used for the online focus groups and the effectiveness of the question guide by gaining feedback from participants. Participants for the focus group were identified by the researcher and the SACIA CEO, Kevan Jones, from a list of SACIA members. An email invitation containing details of the focus group was sent to each of the four pilot participants. Upon their agreement to participate in the focus group, an online meeting invitation was extended. All four participants accepted the invitation and joined the pilot session resulting in a successful pilot study.

There were no connectivity issues. The Microsoft Teams platform proved suitable to conduct the research. Participants were posed with approximately ten open ended questions to explore their perceptions of DX of the sport events subsector as a means of sustainability which was guided into a discussion by the researcher. Feedback from the participants was positive and everyone seemed to enjoy the session. No amendments were made to the question guide. The pilot session also assisted in testing the facilitation skills of the researcher as this was a first-time facilitation.

The pilot test had 100% attendance by confirmed attendees. However, during the actual research, only four of the six confirmed participants per group joined the session despite all six confirming their attendance before the sessions. This was standard incident rate noted across all four focus group sessions during the actual research. This may be avoided in future research by inviting extra participants per group based on the assumption that not all participants will attend on the day. The researcher was

wary of inviting too many participants as it would become difficult to facilitate a large group, and the sessions would be too long potentially resulting in bored, jaded or restless participants.

With the aim of constructing a robust and comprehensive research methodology, consideration arises regarding the trustworthiness of the methods employed.

4.5 TRUSTWORTHINESS

The trustworthiness of the research is grounded in Lincoln and Guba's four-dimensional criteria- credibility, dependability, transferability and confirmability, which collectively ensure the reliability and validity of research findings (Lincoln & Guba 1985: 9; Ghafouri & Ofoghi, 2016: 1915). By addressing these aspects within the research design, the researcher strives to enhance the integrity and trustworthiness of the study and reinforce confidence in the accuracy and meaningfulness of the research findings (Stahl & King, 2020: 26).

Credibility: Peer debriefing was used to enhance the overall credibility of the study. In peer debriefing, the researcher engages in discussions with colleagues or peers who are well-versed in qualitative research methodologies. This method provides an external perspective and helps to identify potential biases in the research (Nowell et al., 2017: 13). The researcher has discussed and sought advice and opinion from experienced researchers at UNISA such as the supervisory team throughout the duration of methodological design and documentation of the study.

Dependability: Dependability is associated with consistency and replicability of the research (Vu, 2021: 4). Methodological transparency was applied to achieve this. A clear account of the research methodology, including the process of participant selection, data collection and analysis has been documented and transparently reported in this chapter. This detailed account of the research process upholds the methodological transparency and allows for the scrutiny and replication of the study therefore contributing to its dependability.

Transferability: Transferability in qualitative research refers to the degree to which findings can apply or be transferred to other contexts, based on the richness of descriptive data provided (Korstjens & Moser, 2021: 50). The process and the findings of this study were described in detail in the research report to enhance the potential transferability of the findings.

Confirmability: Confirmability in a study is established through an audit of the research process and involves an assessment of the value contained in the data uncovered and reported (Creswell, 2007: 204). Detailed descriptions of the process and how conclusions were reached have been documented throughout this study.

The trustworthiness of the study was enhanced by employing the above strategies, ultimately contributing to the validity and reliability of the research findings. Each of these measures addressed different aspects of trustworthiness, collectively reinforcing the overall quality of the research. The next section discusses the ethical considerations of the study.

4.6 ETHICAL CONSIDERATIONS

Throughout the research process, ethical considerations such as informed consent, confidentiality and participant well-being were strictly upheld to protect the ethical integrity of the study.

Firstly, the gatekeeper's consent was sought before the commencement of the research, granting access to information and to the contact details of SACIA members. A copy of the gatekeeper's permission letter is attached as Appendix A.

Informed consent is the cornerstone of ethical research (Fleming & Zegwaard, 2018: 209). Participants must be fully informed of what will be asked of them, how the data will be used and what (if any) consequences could arise. A clear and concise information sheet and consent form was sent to all participants prior to the focus group sessions. The participants were asked to provide signed consent to participate in the research endeavour as well as an understanding of their rights to access to their

information and the right to withdraw from the study at any point. A poorly constructed information sheet and consent form may result in a weak consent agreement, which may compromise the quality of data collected due to mistrust (Fleming & Zegwaard, 2018: 211) and not provide sufficient protection for the participant or the researcher. A copy of the participant information sheet and consent form is attached as Appendix C. Risk of harm, anonymity and confidentiality are of utmost important when conducting research with human participants. Ethical clearance was granted by the UNISA ethics committee with the assurance that the data derived from the research will be protected against misuse. The ethical clearance certificate is attached as Appendix B with ethical clearance number 2311. The data derived from the research is stored in a password protected folder on the researcher's personal computer with only the researcher and the supervisory team having access to the data. The data will be destroyed after a period of five years.

While anonymity cannot be entirely guaranteed during focus group research (Sim & Waterfield, 2019: 3009), the names of participants were kept confidential and replaced with aliases during the reporting. Anonymity and confidentiality are an important step in protecting the participants from potential harm (Sim & Waterfield, 2019: 3008). Participant anonymity and participant confidentiality are two terms commonly used synonymously when in fact they are different. Participant anonymity means the participant's identity are unknown to the researcher (for example, when using anonymous surveys, the participant identity is truly unknown to the researchers) (Sim & Waterfield, 2019: 3008). Participant confidentiality means the participant's identity are known to the researcher, but the data was de-identified, and the identity is kept confidential (for example, interviews, where the participant identities are known to the researcher, therefore, only confidentiality, not anonymity, can be offered) (Sim & Waterfield, 2019: 3008).

Bias in qualitative research refers to the presence of systematic errors or distortions in the research process that can lead to inaccurate or unfair representations of the studied phenomena (Smith & Noble, 2014: 100). Addressing bias in qualitative research is not only crucial for the validity and reliability of the findings but is also a key aspect of ethical consideration (Mackieson et al., 2019: 967).

Interviewer bias occurs when the interviewer's beliefs, attitudes or behaviour influence the participant's responses, leading to a skewed representation of the data (West & Blom, 2017: 177). A semi- structured question guide was used by the researcher to increase consistency among all focus groups (Brett & Wheeler, 2021: 75). Reflexive practices were applied to minimise any potential interviewer biases. Reflexivity is the process through which researchers critically reflect on their own role, assumptions and influence throughout the research process through the act of journaling or creating memos (Addison et al., 2025). Although the primary researcher in this study also assumed the role of the facilitator during the focus group sessions, the researcher did not exhibit any reaction to/ influence on participants' discussions and responses during the focus group. The role of the facilitator was to solely to ensure the seamless flow of ideas and conversation among attendees and to be able to probe further when topics of interest arise.

Participant bias, also known as social desirability bias, arises when participants respond in a way they believe is socially acceptable rather than providing honest or authentic responses (Qaddo, 2019: 6). Ensuring confidentiality and emphasising the importance of honest responses while respecting participant autonomy help reduce participant bias (Petrova et al., 2016: 446). Participants were informed that their responses would remain anonymous, which helped reduce social desirability bias. Open-ended questioning techniques were used to elicit authentic, reflective responses, and participants were encouraged to share honest perspectives without pressure to conform (Guest, Namey & Mitchell, 2023: 41).

Response bias occurs when participants provide inaccurate or distorted information due to memory lapses, misunderstandings or a desire to please the researcher (Wetzel et al., 2016: 2). Neutral wording was used in the design of the question guide to minimise the influence on response from the participants. A short icebreaker was conducted before each focus group to calm the nerves and anxiety of participants.

4.8 SUMMARY

This chapter discussed the rationale behind adopting the specific research methodology. The methodology was developed in accordance with Saunders, Lewis and Thornhill's Research Onion to ensure that it was well aligned with the research objectives of the study. A detailed description of the data analysis process was provided. The discussion extended to the aspects of trustworthiness and ethical considerations, highlighting the commitment to rigor and integrity throughout the study. The next chapter shifts the attention to the analysis of the findings from the focus groups. This phase involves extracting meaningful insights and attributing significance to the gathered information, thereby advancing the study's objective which is to explore the perceptions of SACIA members of how DX can assist with the future sustainability of the sport events subsector.

CHAPTER FIVE: DISCUSSION OF FINDINGS

5.1 INTRODUCTION

Chapter Four provided a detailed description of the research methodology that was applied to extract and analyse the data as prescribed by Saunders, Lewis and Thornhill's Research Onion. In this chapter, the findings of the research and the key themes that emerged from the analysis process are discussed to provide insight and significance in the pursuit of achieving the study objectives. Finally, the implications of the findings on the guiding Disruptive Innovation Theory are addressed, highlighting how digital transformation can serve as an option for the future sustainability of the sport events subsector. The chapter opens by revisiting the primary and secondary research objectives of the study.

5.2 RESEARCH OBJECTIVES RECAP

The primary objective of this study is to explore the perceptions of SACIA members regarding how digital transformation can assist with the future sustainability of the sport events subsector.

Secondary research objectives are supplementary goals that support the primary objective by exploring related aspects. The secondary objectives for this study are highlighted below.

5.2.1 Secondary objective 1

To explore the nature of the challenges that SACIA members have experienced in the sport events subsector during the COVID-19 pandemic

5.2.2 Secondary objective 2

To explore the perceptions of SACIA's members as to the nature of the digital transformations that have taken place in the sport event subsector to bring sport events to supporters in the context of the COVID-19 pandemic.

5.2.3 Secondary objective 3

To explore the alternative technologies that the members of SACIA believe could be introduced to enhance the sustainability of their subsector post COVID-19.

5.2.4 Secondary objective 4

To explore the views of SACIA's members as to the association's past role and the future support that is required for the digital transformation of the subsector as a means of sustainability.

The following section presents an analysis of the findings in relation to the above objectives beginning with a summary of the study sample. Table 5.1 summarises the key data collection statistics of the focus groups to provide a quantitative overview of the study.

Table 5.1: Summary of data collection statistics

Data collection method	Focus groups
No. of participants	16
Average duration per session	60 min
Participant profile	SACIA members representing diverse roles in the sport events subsector
Age	18-65
Gender	Mixed gender, nine males and seven females
Data collection period	September - October 2024
Medium of data collection	Virtual
Primary tools used	Microsoft Teams

The focus groups comprised a total of 16 SACIA members, representing diverse roles including event organisers, financial directives, senior management and government officials, as well as technical production and camera crew, within the sport events subsector. Participants were drawn from across South Africa and extending to the broader African continent, including Botswana and Zambia. The focus groups were conducted virtually via Microsoft Teams between September and October 2024. Virtual focus groups have been shown to enhance participation rates and reduce logistical barriers when compared to traditional face-to-face methods (Stewart & Shamdasani, 2014: 91). Each session lasted an average of 60 minutes. The participant demographic ranged from 18 to 65 years in age, thereby incorporating insights from both emerging professionals and experienced industry practitioners. A diversity in age allows for a better understanding of the digital adoption patterns, as younger professionals are viewed as more adaptable to technological changes, while seasoned experts offer historical perspectives on industry shifts (Selwyn, 2021: 58). The mixed gender composition consisting of nine male and seven female participants also contributed to a balanced perspective of digital transformation of sport events. Previous studies, such as Nishii (2013: 1755) have highlighted the importance of gender diversity in focus groups, as it leads to a broader range of viewpoints and experiences.

The above quantitative representation of the research establishes the context for the subsequent qualitative analysis. The key themes that emerged from the data were examined through thematic analysis. Below is an overview of the key themes that were identified.

5.3 OVERVIEW OF KEY THEMES AND ANALYSIS

A total of 348 individual codes were assigned during the analysis process which were then grouped into “subthemes”, with each subtheme forming part of one of four broader key themes. The first major theme that was identified was ***challenges encountered during the COVID-19 pandemic***, which was divided into the following subthemes: emotional and psychological distress, financial implications and economic impact and a lack of social interaction and interpersonal communication. The second

major theme centred on **digital transformation and innovation**, highlighting the alternative technologies employed during the pandemic and the opportunities and barriers associated with their adoption. The third theme focused on the **future sustainability of the sport events subsector**, exploring various aspects of sport event management and the industry focus as well as the impact of a digital transformation on workplace and organisational dynamics. This theme examines the long-term viability of digital transformation in ensuring industry resilience and growth. Finally, **SACIA's role** was identified as the last key theme in shaping the sector's digital transformation resulting in discussions on SACIA's past and future role in supporting technological advancements and advocating for an industry-wide adoption. Figure 5.1 depicts the coding hierarchy and how subthemes align under the main themes illustrating the coding process thematic framework.

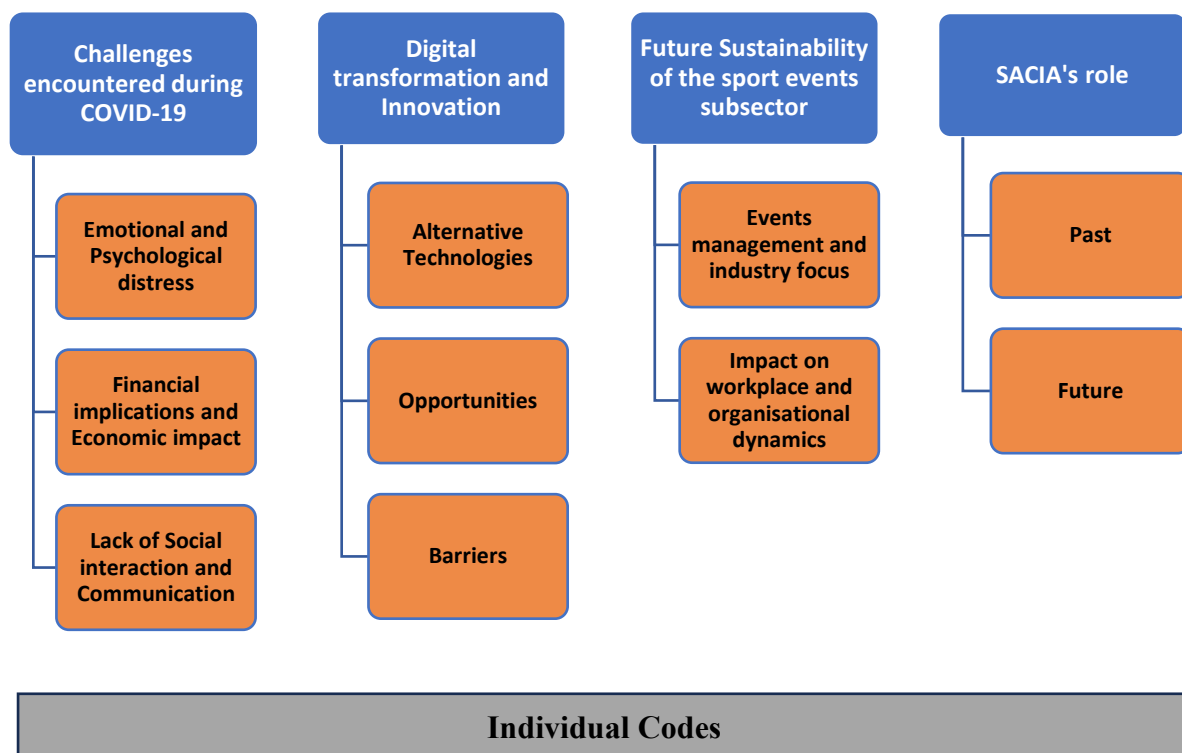


Figure 5.1: Coding process thematic framework

(Source: Author's compilation)

5.4 DISCUSSION OF KEY THEMES

Each theme is discussed in detail, according to the relative subthemes, to provide a deeper understanding of the members perceptions and the findings of the research.

5.4.1 Challenges encountered during the COVID-19 pandemic

The challenges that members encountered during the period are related to emotional and psychological distress, social interaction and communication, and financial and economic impact.

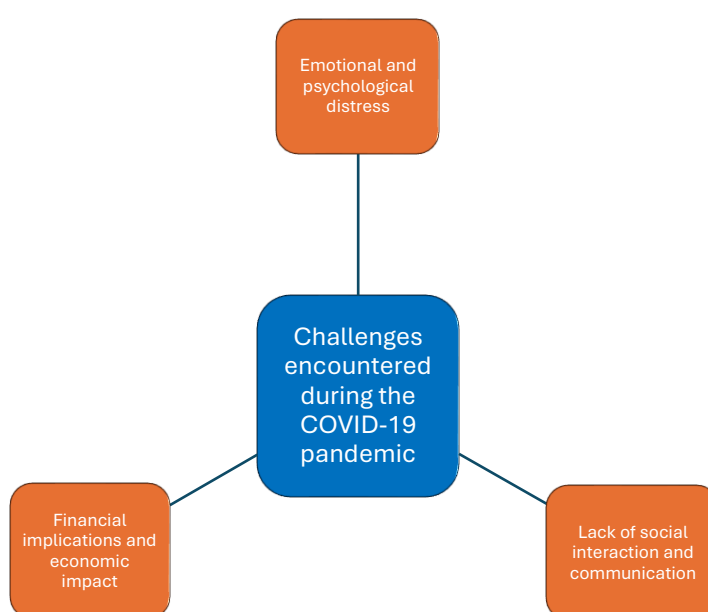


Figure 5.2: Illustration of theme 1 with subthemes

(Source: Author's compilation)

5.4.1.1 Emotional and psychological states

During the COVID-19 pandemic, SACIA members faced significant emotional challenges due to restrictions prohibiting them from working and a prolonged period of uncertainty about the future. Participants described the situation as highly stressful, characterised by feelings of anxiety, frustration and fear of loss of livelihoods. These perceptions are evident in the responses below:

Participant 15: "It was frustrating at the time because although the events industry is fairly well regulated, we were targeted by the government as a low hanging fruit to close off without any consideration that there were mechanisms and ways in which we could operate and function appropriately."

Participant 11: "I agree with participant 10, but also the changing rules and regulations at different levels of lockdown was very unstable."

Participant 3: "No lockdown, please. We were getting locked down. No!"

The participants' feelings of insecurity appear to have been exacerbated by the sudden disruption of events:

Participant 15: "I don't even want to speak about it anymore because it was such an awful time. There was a lot of uncertainty in the industry and what that would mean for event organisers that obviously transpired into financial losses, job losses, people leaving the sector and going to other sectors because of all the restrictions and closures."

Participant 16: "It was a time that everyone was entering into uncharted territories. No one had absolute idea of what was going on. Life just came to a halt. Now trying to figure out then to see how we should move on from here."

Some members described their experience as traumatic, as the prolonged lack of employment opportunities impacted their mental health and overall well-being:

Participant 14: "We've probably all experienced the same thing in terms of just not having the numbers there, but I would say I personally I had a more mental breakdown."

Participant 15: "I still have some hidden trauma once I open the wound, there's quite a bit to say about COVID-19, but I'll leave it there."

5.4.1.2 Financial and economic impact

The second subtheme relating to the challenges that SACIA members faced was the significant financial implications for the subsector due to live events being shut down, a finding that aligns with findings by Daniels and Tichaawa (2021), who identified similar severe financial losses suffered by South Africa's sport event tourism subsector as a result of the COVID-19 pandemic and the cancellation of events.

Participant 12: "That was a huge impact. The financial implications were bigger than the guidelines/prohibitions but obviously the fact that the doors were closed was the root cause of all of this."

According to SACIA members, the financial implications were mainly attributed to a lack of preparation due to the sudden and unanticipated nature of the pandemic, and the lower number of people who participated in events organised online during the period:

Participant 6: "The biggest challenge was getting participants to take part and even still today to get them to come back to doing mass participation events... I found technically event organisers during COVID-19 were not prepared...The presenters were not briefed on how to cope with a hybrid event which had 100 people at the venue and 1000 people outside."

5.4.1.3 Social interaction and communication

Another significant challenge that the SACIA members faced during the COVID-19 pandemic was the lack of social interaction and communication due to widespread restrictions and lockdown measures. The absence of in-person events, which are foundational to their professional roles, hampered effective collaboration, networking and client engagement. This finding is supported by the responses recorded below:

Participant 1: "A major challenge during Covid was not being able to have meetings. Covid taught us that platforms like zoom and teams really worked amazingly over that almost two-year period."

Participant 13: “There was this restriction on gatherings that had an impact on the delivery of sport in its existing format.”

Members expressed sentiments of isolation, disconnection and a diminished sense of community, as the sector’s traditionally interpersonal nature shifted abruptly to remote platforms:

Participant 3: “Some events could not be held virtually.”

The lack of physical presence also impacted team dynamics and weakened the informal exchanges that typically foster innovation and mutual support within the sector. As a result, participants emphasised the need for improved digital communication strategies to mitigate such challenges in the future:

Participant 2: “We had a few virtual events, but again no in person events.”

Participant 9: “I don’t know if that is making me sound very old, but for me that is the real threat. The loss of interpersonal skills.”

The findings above are consistent with those of Saladino et al. (2020: 1) who also found that fear, isolation, and anxiety were part of the emotional and psychological consequences of the COVID-19 pandemic.

In summary, members reported facing challenges of emotional and psychological distress, significant financial and economic strain, and reduced social interaction and communication during the pandemic. These impacts highlight the need for sustainable strategies to support the resilience of the sport events subsector.

5.4.2 Digital transformation and innovation

The second key theme that was identified was the digital transformation and innovation of the subsector, beginning with the alternative technologies that were used to bring sport events to spectators during the pandemic and then proceeding to the alternative technologies that participants believe could be introduced to enhance the

sustainability and resilience of the subsector, and then the opportunities and barriers associated with the use of these technologies.

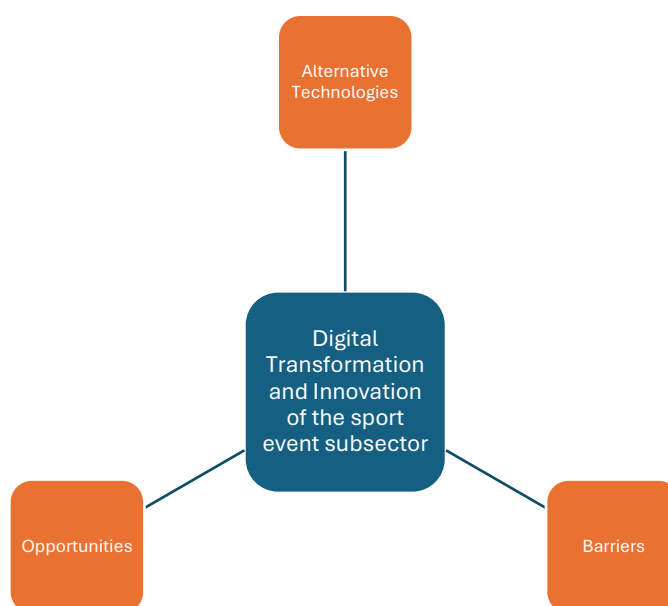


Figure 5.3: Illustration of theme 2 with subthemes

(Source: Author's compilation)

5.4.2.1 Alternative technologies

Majority of participants believe the future sustainability of the sport event subsector lies in enhanced digital platforms and digital transformation. According to members, the following alternative technologies were used to bring sport events to spectators during COVID-19:

Participant 4: "We experimented a step further which worked pretty well when we streamed an event and sold tickets for people to watch the performance via Live stream as opposed to an in-person event."

This data supports the feasibility of sustaining the sport events subsector through digital transformation and the availability of technologies such as a live stream and Zoom as suggested by Richards (2022), in his examination of the digital pivot of events.

Participant 2: "Where it's too expensive or there's too much on the carbon footprint side of things to travel, the Zoom platforms and technology has shown that it is easier."

Although concerns were expressed regarding the expensive nature of digital and online platforms, the collective perception gathered from SACIA members shows that the sport events subsector can be sustained through digital transformation.

Participant 13: "A lot of the codes [forms] of sport where it could lend itself, started to have virtual competitions. It was virtual cycling events, and virtual marathons, which allowed for the athletes to compete remotely and then submit information online into some portal or other. That was one of the things that assisted in ensuring continuity in some of the events."

The digital transformations that took place during the COVID-19 pandemic elicited a positive response from the members of SACIA:

Participant 10: "One of the positive things that came from during the Covid era was that there was less traveling, and we can have virtual meetings. Even after the lockdown we continue with the virtual meetings. It was cost-effective with regards to maybe organisation to save money, you know with less traveling this one of the positive things that came from that."

The digital transformation of sport events, during the pandemic, was perceived as more cost-effective because there were no travel expenses and other related expenses that accompany in-person events. The perception of SACIA's members demonstrate that digital transformations have unlocked greater potential for the sport event subsector and was able to deliver sport events to supporters during the COVID-19 pandemic. This finding supports the work of Yilmaz et al. (2023: 25) and Tiefenbeck (2017: 2) who have similarly stated in their research that digital transformation enhanced the growth potential and unlocked greater operational capacity for SMEs due to cost savings as a result of digitalisation.

Another perception of SACIA members that emerged from the findings was the creativity that comes with the use of digital tools for capacity building:

Participant 3: "Covid taught us how to use and digital effectively. It forced us to get creative and to find different ways of continuing... It forced us to use platforms like Zoom and Teams and by using these digital tools, it's broadened our horizons to develop more tools."

While being forced to use virtual platforms such as Zoom and Teams, SACIA members expanded their knowledge and perceptions regarding the potential of digital transformation to assist with the future sustainability of the sport events subsector:

Participant 11: "From my side I think it gave people the opportunity to think creatively. In ways of how one did things traditionally so that it gave people the opportunity to meet in different ways."

Opportunities have been created through the transformation and sustainability of the subsector as it serves as a tool for capacity building for members of SACIA. Perceptions of SACIA members regarding how digital transformation can assist with the future sustainability of the sport events subsector and create opportunities for capacity building:

Participant 6: "South Africa could never host the Olympics. We don't have the capacity. But if it was a digital thing, we could make all our money out of the TV rights and host it for like 1000 people in the stadium then we don't have to build a big stadium and just do a digital which is an interesting concept."

The participants expressed the opinion that the creative use of digital tools has the potential of generating a larger revenue for the subsector. The findings reflect those of the previous studies that have examined similar issues like Taha (2011: 11) in his article *"Creative capacity building in post-conflict Uganda"* and Breuleux, Laferrière and Lamon (2002) in their work capacity building and the uses of ICTs who found that the implementation of digital tools created additional revenue streams for sectors and improved income generation.

Participant 2: "Technology enabled us to overcome challenges by using platforms such as Zoom and Teams."

When asked about the nature of the digital transformations that took place during the COVID-19 pandemic, it was stated:

Participant 15: "I can remember thinking about the wellness aspect that the players themselves also then said that this contributed to like depression in the stadium and digital technology kind of made that better. I can remember fan walls becoming a thing."

This statement indicates that the COVID-19 pandemic was a period of clear exposure to digital transformation in the sport events subsector and the current trend as to where the subsector is headed.

Previous studies have also demonstrated that the digital transformation that has taken place during the COVID-19 pandemic is transformative in itself, as Uddin et al. (2023) presented in their work, "Does digital transformation matter for operational risk exposure"; similarly, Dengler, Hiesinger and Tisch (2022) presented in their work on digital transformation and the role of computers in government and public sector. These works emphasise the importance of exposure to digital transformation during the COVID-19 period as the current research findings reveal.

The position of participant 6 is that the nature of sport registration has changed due to the application of digital technology.

Participant 6: "The first positive that came out of Covid was that the registration process for events became paperless and quite a few of the event organisers managed to get cell phone apps and that sort of stuff developed to ensure paperless thing and that's a very big positive."

Participant 9: "The expansion of ticketing, and digital ticketing is a defining moment as well as the growth of it, post-Covid."

The online registration process which was expanded during COVID-19 and the increasing role of technology in the sport events subsector was viewed as a defining moment for SACIA members. This finding aligns with the work of Baiyere, Salmela

and Tapanainen (2020) on digital transformation and management processes in business where the researchers highlighted the need for a modern method of registration processes. The current research findings are also in line with the idea of Rasyidnita et al. (2024: 65) in his study of the development of a digital registration information system, in which the scholar established that registration is an essential digital transformation that has taken place during the COVID-19 pandemic.

The statement by participant 15 shows that technology now allows those involved in the sport subsector to engage global expertise for knowledge sharing during event organising.

Participant 15: "Technology now also allows us to engage with global expertise for knowledge sharing. Because we can go on to several platforms, and several places to garner what worked in other events and how we can do it in South Africa. I think feasibility-wise, everybody in South Africa has a smartphone for event ticketing, for example."

Some participants expressed that the implementation of digital technology during COVID-19 brought the world closer together.

Participant 4: "The restriction on movement and numbers was a real blow to the industry and technology...we experimented a step further which worked pretty well when we streamed an event and sold tickets for people to watch the performance via Live stream as opposed to an in-person event."

Participant 2: "Technology worked brilliantly because the use of Zoom made the world smaller and showed you can continue... technology made the world a smaller place than it was before from a meetings perspective."

Participant 10: "Hybrid events have not taken off the way everyone thought they would, because people thought they wouldn't need to meet in person again...It brought people together, families were able to sit together with the family, you know, because of the restrictions that were posed."

SACIA's members view digital transformations in the sport event subsector as an avenue to bring sport events to supporters during times of crisis. These findings are consistent with the findings in Bounfour's (2016: 978) research article on digital futures and digital transformation in the work of Chandler and Fuchs (2019) where the scholars stressed the characterising approaches to digital transformation, just as the current research findings show the perceptions of SACIA's members towards the nature of digital transformation that draws the world closer together and brings sport events to supporters.

The findings show that SACIA members believe alternative technologies such as virtual reality could be introduced to enhance the sustainability of their subsector post-COVID-19, and that further investment in the virtual realm can enhance and sustain the subsector:

Participant 6: "When we ran sporting events in the virtual realm, we did try also make money out of that by getting them to sign up and then still giving them a race pack which we could send them. And at that time, a lot of them welcomed that because they did want to keep the industry going."

The findings of this study indicate that SACIA members believe that VR could be introduced, as an alternative technology to enhance the sustainability of their subsector post COVID-19, because of its growing use. Participants supported the position of VR in enhancing sustainable alternative technologies in the subsector in post COVID-19 era. Onyesolu and Eze (2011: 53) underpin the position of the virtual realm in the modern world as alternative technology in their work on understanding virtual reality technology, and Anyanwu (1998: 154) in his article "Virtual world and virtual reality".

5.4.2.2 Opportunities arising from digital transformation

SACIA members have identified several opportunities that digital transformation presents for the sport events subsector, highlighting its potential to enhance industry sustainability, resilience and competitiveness. Their views emphasise opportunities

across engagement, efficiency, innovation and global reach through the data analytics and social media applications:

Participant 13: "I think for me importantly is also, you know, data analysis. If you're doing registration for major events like the comrades or the Cape Town Marathon or any other marathon, you can collect data that will actually give you when you need to analyse and say how many women participated, where the people with disabilities, how many young people. The age groups. That can become very useful information as well. That you can use for any other purpose as well so that. So that's something that can continue as well."

Participant 15: "I do think that interactive engagement with social media and apps, I mean that has become a real thing...I'm thinking it could also be valuable if people have VR headsets for like the top cyclists on the Cape Town cycle tour and almost feels like you're riding with them."

Participant 13: "The other area for me is an increased awareness of all the platforms on social media, engaging with your sport people."

The shift to digital platforms makes sport events accessible to a wider audience, including those unable to attend in person. Members noted that hybrid event models that combine physical and virtual elements have the potential to increase participation and generate additional revenue streams. Such inclusivity is particularly beneficial for reaching global audiences and those with physical or financial constraints:

Participant 13: "I think there is this opportunity for hybrid models where those who can't participate physically can do so virtually."

Participant 4: "We've got about 40 plus delegates from across Africa participating in that particular training session."

Participant 12: "People who never visited the Okavango Delta and Botswana could also now experience such things. It actually brought the whole world into one single thing that we could all see virtually."

It was found that technological advancements can streamline the event management process, from ticketing and scheduling to crowd control and security. Participants believe that the implementation of digital tools can reduce logistical challenges, lower costs and improve the operational efficiency of planning and executing sport events. Members believe that these efficiencies could free up resources to focus on delivering high-quality experiences. The following view on efficiency was presented:

Participant 6: "It does help if you're talking sport 100%. As long as you can make money out of it and if people are willing to pay a separate subscription to put on an event that makes you feel like in you are in a stadium, then 100%. There are a few venues that open overseas that allow for this type of event."

Several participants highlighted the level of improved remote and content production that emerged from the digital transformations that took place during COVID-19. Participant 2 emphasised that apart from the improved remote and content production, time is saved:

Participant 2: "Instead of spending three hours in traffic to a meeting, you can hop online meetings, get it done, and be more productive."

Participants believe that an increase in broadcast could be introduced to enhance the sustainability of their subsector post-COVID-19:

Participant 4: "My primary function is also towards broadcast, and of course one of the things we do is we cover events and sporting events and something that came out of Covid and squeezed the maturation of the technology is what we call remote production where instead of sending crews out to go and cover events, we could have it done from a central location."

The participant stressed that the sustainability of the subsector after COVID-19 rests on the amount of investment in technology:

Participant 8: "Remote production where instead of sending crews out to go and cover events. I 100% agree some content is better viewed digitally, but then if you make

those events where it's better digitally A better experience there, meaning people are looking forward not to the game, but rather the content in and around the game.”

The findings of the study that focused on digital transformation leading to improved remote and content production of the sport subsector are in line with previous studies of Calandra, Cannavò, and Lamberti (2021: 3147) where the scholars discussed improving AR-powered remote assistance and the optimised use of skilled resources, and Ramírez (2001: 315) in his studies of the model for rural and remote information and communication technologies.

Digital transformation expands opportunities for creative marketing strategies in the sport events subsector. Organisers can use AI-driven insights to develop targeted campaigns, foster brand loyalty and attract sponsors. Technologies like AR allow sponsors to integrate interactive ads seamlessly into events which can offer additional revenue opportunities:

Participant 12: “There's marketing and branding and advertising opportunities in streaming and even broadcasting if there's no one in the venues and it's played behind closed doors that's definitely for us that's a game changer.”

Participant 15: “Media and apps, I mean that has become a real thing. I'm also thinking about the marketing of sporting events as such and how that has really like things have gone viral. And again, if I use the Springboks and the Weinberg boys that did their chant, they posted.”

This finding aligns with the study by Walker (2021), who found that sport organisations adopting sustainability practices often experience an improvement in public perception and brand loyalty.

The study found that the integration of digital solutions offers pathways to more environmentally friendly operations. Virtual attendance options and digital ticketing reduce the carbon footprint associated with travel and paper use, aligning the industry with global sustainability goals. Members noted that embracing digital transformation could position the subsector as a leader in environmental sustainability:

Participant 15: “From an eventing sustainability side and using technology sustainably or how we can do that because that was part of your question. The simplest win is basically the E ticketing and mobile ticketing. We don't print out these tickets anymore, so that's quite sustainable. We use it for sporting. There's no waste with regards to that. Even transportation if we think about how much carbon emissions go out when we all travel to sporting events and fly down, we try at events. Usually if we have a big event to encourage people to use public transport systems or to carpool together and also done through ride sharing apps or through car-pooling that's advertised digitally.”

A common viewpoint amongst participants was that live streaming presented an opportunity for the subsector to generate additional revenue. Members foresee additional revenue streams resulting from the introduction of digital channels such as subscription-based virtual access, pay-per-view models and interactive merchandise sales. Additional revenue streams allow event organisers to diversify income and increase their resilience against unforeseen disruptions like pandemics. Participants stressed that money can be made through digital transformation and at the same time sport events are made easier:

Participant 6: “It does help if you're talking sport 100%. As long as you can make money out of it and if people are willing to pay a separate subscription to put on this thing and you're sitting and you're like in you are in a stadium, then 100%. There are a few venues open overseas where they've set up room to be used for this purpose.”

Participant 13: “It was live streamed so that was another opportunity. There was also an opportunity for communications and engagements on social media platforms on other digital platforms where your fans could be connected to stay connected.”

The findings suggest that the engagements on social media on other digital platforms remain a tool for the sustainability of the sport event subsector through digital transformation in South Africa, which is consistent with the findings of Glebova, Gerke and Book (2023: 169) in his work centred on the transformational role of technology in sport events.

Participants highlighted the role of digital transformation in enhancing sustainability and resilience. The subsector can adapt to external threats, using AI to ensure continuity and minimise disruptions to operations as was the challenge during with COVID-19. These views suggest that digital transformation offers the sport events subsector various opportunities to innovate, grow and remain competitive in a rapidly evolving landscape. However, strategic adoption and management of these technologies are essential for capitalising on their full potential.

Participant 1 believes that artificial intelligence not only ensures the smooth operation of work but also enhances work such as ensuring safety and security at an event:

Participant 1: “AI technology is continuing to change so many different industries... if someone is injured or sick at an event, for example, the information is being sent directly and in real-time to the hospital where that's already been arranged and it can even be a hospital in another city.”

The current research findings support AI as an alternative technology that SACIA members could use to enhance the sustainability of the subsector post COVID-19. This finding is consistent with the work of other studies in this area such as Jarrahi (2018: 577) whose research on emerging technologies demonstrates that artificial intelligence is not a transient, but rather an enduring technological advancement capable of developing human capabilities and enhancing workplace performance, which is similar to the position of Ramírez (2001) in his study of remote information and communication technologies.

5.4.2.3 Barriers to digital transformation

According to SACIA members, the adoption of digital transformation within the sport events subsector faces several barriers, influenced mainly by cost constraints, skills gaps and unemployment as well as other socio-economic and demographic factors.

The cost of technology presents a major barrier to digital transformation:

Participant 6: “I think cost is the biggest thing.”

Participant 7: "That has a negative impact on the event organisers because of the financial implication."

The SACIA members maintained that innovations such as VR, AR and AI often require substantial financial investment, not only for acquiring the technology but also in maintaining and upgrading it. For small and medium enterprises in the subsector, these costs can be prohibitive, particularly when compounded by the financial strain many organisations experienced during the COVID-19 pandemic:

Participant 4: "Not everybody had the means or the resources for virtual meetings. They there's some logistics involved and different costs to host a virtual event."

Participant 14: "So yes, they can actually invest in that can happen. it's feasible. It's doable as long as the investment is there. The commitment is there."

Affordability presented another significant barrier, as many South African supporters lack the financial resources to invest in advanced technologies such as VR, AR and AI:

Participant 14: "When it comes to other challenges as well, is how much is someone willing to invest into technology because these technology things they also come pricey."

The high cost of hardware, software and associated training makes it difficult for smaller businesses and low-income consumers to access these innovations:

Participant 8: "Especially when you look at technology and all of these things come this very expensive when someone wants to do an event with a streaming component. Streaming is not cheap."

Participant 13: "But it also denied people who, especially those in the rural areas, to participate because of the lack of connectivity and the lack of resources to participate."

For event organisers aiming to adopt digital methods, affordability constraints limit the ability to scale and compete effectively in a technology-driven market:

Participant 8: "So again, you're losing market and limiting your scope to a certain type of person, which in sporting you want everyone to come through because everyone has some money to spend again."

Although SACIA members perceived South Africa as possessing competitive skill sets to accommodate a digital transformation of the sport events subsector, the high unemployment rate presented further complications to these efforts:

Participant 15: "We have skills in our country, and we are quite resilient to making these things work and showcasing. It's almost like saying "hulle weet nie wat ons weet nie." (They don't know what we know).

Participant 7: "I think we have a lot of knowledge and experience to share with people in the communities to motivate them to actually develop that skill to take the industry forward."

Organisations struggle to find qualified personnel with the technical expertise required to operate and innovate using these advanced technologies:

Participant 14: "That's one thing. And then in terms of the skill set, Its starts with our education curriculum. If we've got robotics and all these that is being introduced. You tend to give those children coming up and then they form part of that skill set and they fill the gap of unemployment and things like that. Apart from that, these are the government run schools, they are not really equipped to produce these skills."

Additionally, the transition to digital methods can lead to job displacement, particularly for roles heavily reliant on traditional event management approaches, exacerbating concerns about workforce stability in the country:

Participant 1: "Unemployment does play a massive role most countries do have a certain level of unemployment, but ours are scary in South Africa compared to other

countries. I think the massive one that we can't avoid is like Participant 3, saying unemployment, that's a massive drawback."

Participant 3: "Yeah, I don't think it is much wisdom in AI taking jobs away from people because our people need the work."

Age and demographic factors also appeared to influence the adoption of digital transformation. According to participants' responses, older employees, who may be less familiar with emerging technologies, often face greater challenges in adapting to new technology. The generational divide can thus impact organisational cohesion and slow the pace of transformation, as some staff members may require more training to align with digital practices:

Participant 11: "We just need to be hanging in there, our children, our grandchildren. I think they born with phones in their hands."

Infrastructure limitations appear to compound these issues as reliable access to high-speed internet and electricity remains uneven across the country, particularly in rural and under-served areas:

Participant 1: "We need to first attend to those kinds of things, and you know like essential services and municipal services. Fixing anything from potholes to street lights to crime before we can even start really investing money or government funds in like a lot of these new technologies, but to Participant 2 point, once we South Africans resolved is aligned as a nation that once we do get stuck into it and accept it and start catching up with the rest of the world on like AI I think we will do extremely well with it."

Participant 14: "Load shedding and the like at least. Well, I think we are now running over 160 days without load shedding so far, which we don't know how sustainable that will be because once that load shedding starts and then it's going to become a challenge again."

These infrastructural gaps hinder the implementation of digital transformation strategies and create disparities in the adoption between urban and rural regions:

Participant 15: "Infrastructure. Challenges and inconsistencies in connectivity depending on where you are and the big well-funded sport federations are fine. But if you go to the smaller communities and that is what's up, Africa's landscape is about, you find that connectivity and things like that is a big issue."

Participant 12: "But the negative of that is I don't think we are ready from an infrastructure, definitely not in the football market and it's furthermore complicated with connectivity issues at venues. From government, local government, national government, they should be a plan in the process to provide connectivity to venues for free."

Addressing these barriers requires a concerted effort to foster a culture of innovation, secure funding for technology adoption, invest in workforce upskilling and ensure inclusive strategies that bridge demographic divides. Recommendations for overcoming obstacles and achieving the full potential of digital transformation in the sport events subsector are discussed in Chapter Six.

5.4.3 Sustainability

The third major theme that emerged from the focus groups is the sustainability of the subsector which has been divided into subthemes based on events management and industry focus, and the impact that it has on workplace and organisational dynamics.



Figure 5. 4: Illustration of theme 3 with subthemes

(Source: Author's compilation)

5.4.3.1 Events management and industry focus

A variety of perspectives were expressed by the participants regarding the sustainability of the sport events subsector through digital transformation:

Participant 1: "Covid showed us that we could use technology, so it transitioned to digital. We were able to continue where face-to-face events died."

Participant 4: "We used online platforms for virtual meetings, and it taught us that we can continue using these platforms for meetings...I still use them every day as much as I prefer to have in-person meetings. Still, it works well, even post-lockdown for being able to meet people all over the country or internationally and still be productive and get the job done."

When the participants were asked about their perceptions of the sustainability of the sport event subsector, the majority of respondents agreed that the continuity and future of the sport events subsector are made possible through digital transformation. Although Participant 4 expressed reservations about the digital transformation

because of his preferences for in-person meetings, he acknowledged that the same technology has helped him remain productive during COVID-19:

Participant 4: "I do prefer to have in person meetings, but it really works well, even post lockdown for being able to meet people all over the country or internationally and still being able to be productive and get the job done."

Participant 6: "A lot of sport managed to run some virtual events during Covid, and what that has done is opened the door for physical events to also have a virtual component."

Findings indicate that SACIA members see digital transformation unlock opportunities for physical events and inclusivity in the future, consistent with the works of Langley and Knight (1999: 32) on continuity in sport participation among the elderly with the aid of technology. These findings agree with those of Raw, Sherry, Rowe and Turner (2021:369) in their work on "safety and relational continuity in sport for development with marginalised young people". The study found that digital technology was able to bridge the gap of inequality in sport codes and provide safe and stable environments among disadvantaged youths.

5.4.3.2 Impact on workplace and organisational dynamics

Although technologies such as VR, AR and AI foster innovation, streamline operations and unlock new opportunities for engagement with audiences, a mixed view emerged from the members regarding the impact of digital transformation on workplace and organisational dynamics of the sport events subsector as evident in the responses below:

Participant 12: "Now things are done digitally. Signing off this one of the key things that we think it has always been a struggle. Now documents are signed, even offsite, during weekends. It's just a phone call away and say I have this document that needs to be signed. It doesn't have to wait for Monday till people are in the office. Digitally we have really gained due to the COVID restrictions that were put on us has become one of the key issues that we are still proceeding even in today's way of business."

Participant 1: "I still use them every day as much as I do prefer to have in person meetings, but it really works well, even post lockdown for being able to meet people all over the country or internationally and still being able to be productive and get the job done."

Participant 10: "Even after the lockdown, we continue with the virtual meetings. It was cost effective with regards to save money, you know with less travelling this one of the positive things that came from that."

VR, AR and AI also enable remote collaboration, enhance data-driven decision-making and support hybrid event models that combine physical and digital experiences:

Participant 3: "Yes, the events industry has evolved. It forced us to use platforms like zoom and teams and by using these digital tools, it's broadened our horizons to develop more tools, to serve us, to serve Events, make it safer and smoother."

Participant 12: "Business moved to a digital platform and focused on websites and on apps and on virtual platforms. That was a big change in our business."

The transition still requires significant adjustments, including upskilling employees, restructuring roles and addressing resistance to change:

Participant 4: "You still have to set things up and then stream it which is a challenge."

Participant 7: "You find people that when they are going to become a speaker You have to adapt to the technology that's available and the instance I mentioned now is they had a handheld mic or a standing mic where the speaker refused to put a headset on."

Organisations often face challenges related to integrating new technologies into legacy systems, maintaining team cohesion in a digitally dominated workplace and managing the financial implications of such a transformation. Leaders should thus

foster a culture that embraces change while ensuring inclusivity and accessibility in their digital initiatives (Singha, 2024: 139).

5.4.4 SACIA's role

The last key theme breaks down the role that members believe SACIA has played in the past and should play in the digital transformation of the subsector going forward.



Figure 5.5: Illustration of theme 4 with subthemes

(Source: Author's compilation)

5.4.4.1 Past role

SACIA's members pointed out that the association has been consistent with ensuring health and safety compliance across the industry in the past and which is still very much needed for digital transformation of the subsector as a means of sustainability:

Participant 13: "I must be honest, I can't quite recall all the details of what they did, but I do know that the leadership was quite active in advising government and the sector as a whole and helping to prepare the strategies of what can be done in terms of the compliance with all the health and safety regulations."

Participant 10: "SACIA enforces compliance to ensure that you minimise the risks when it comes to all the sporting activities or the sport events or any other events. It is a sporting event, so safety issues are the most important thing that needs to be adhered to".

Participant 13: "Importantly, you know there's areas of compliance that need to be reviewed, especially with South African sport and I think there's quite a bit of review that needs to be done to make it more compliant to the industry as well."

The research finding regarding SACIA's role in ensuring safety and compliance in the subsector aligns with the position of Griffin and Hu (2013:196), where the scholars examined different motivations for safety compliance and safety participation in government institutions, and the findings of Subramaniam, et. al. (2016: 226) which emphasised the importance of safety management practices and safety compliance. The present research findings show that SACIA members similarly view safety compliance as a major role SACIA plays in the digital transformation of the subsector. Secondly, participants believe that SACIA has played a significant role in promoting the professionalism and integrity of the events sector:

Participant 11: "I think SACIA's role, I agree with safety and compliance, but also as a business you work with integrity in the industry."

Participant 12: "If you look at professional designations like management and safety, there are standards written into that. And when you acquire that designation, that's what you subscribe to."

The findings of this study indicate that members believe that SACIA worked to ensure the professionalism and integrity required for the sector. The current findings are consistent with those of Cleary et al. (2013: 264) who stressed the importance of promoting integrity in the workplace irrespective of the nature of the work. Similarly, Malin (2000: 17) underscores the importance of professionalism in his book *Professionalism, boundaries and the Workplace* which is an ideal mandate that associations should promote and project. Thus, the current research shows that the views of SACIA's members, as to the association's past role, centres on ensuring and

promoting safety and compliance, maintaining professionalism among industry players and offering training and professional designations for members supported by existing literature.

5.4.4.2 Future role

SACIA's members opined the future support required for the digital transformation of the subsector as a means of sustainability as follows:

Standardisation: As part of the future support required for the digital transformation of the subsector as a means of sustainability, standardisation was stressed:

Participant 3: "I would love to see standardisation of event safety, at the moment the rules in Joburg are different to Pretoria or different to Cape Town...I think SACIA can play a big role in lobbying for the same rules, and that if we have access to it digitally, it can make life so much easier."

Participant 2: "On that point, even standardisation in fees, like the film industry has, they've advanced even standardisation in working hours."

Participant 3: "Standardising health and safety regulations differs from province to province and it's not just standardisation from our profession but also from a government and local authority point of view."

Participant 1: "I agree 100% with both of you, SACIA could definitely help with that throughout the country to try and standardise the industry."

SACIA members would also like to see online applications for permissions and approvals for hosting of events:

Participant 1: "When you also are just looking for your various permissions and approvals for your event. If SACIA could assist the industry to make that all electronic and digital applications."

The findings indicate that participants reported that the future support required for effective digital transformation of the subsector centres around the provision and strengthening of standardisation of the subsector. Consistent with the literature, this research supports that standardisation can contribute to the successful digital transformation of the subsector, using also Kirchmer's (2023: 18) in an article around realising appropriate process standardisation as the basis for effective digital transformation as well as the research by Puustinen (2021), who highlighted the need for industry-wide standards to guide sustainable practices in sport events.

In addition to the above, participants expressed the need for advocacy and fair representation in the subsector. SACIA is required to represent members' interests to stakeholders such as government bodies and private investors. This role includes specifically lobbying for favourable policies that facilitate digital transformation and addressing regulatory barriers that may delay innovation. Additionally, SACIA can provide strategic guidance on integrating emerging technologies such as VR, AR and AI effectively into existing business models.

SACIA, as an association, can be a representative between the government and the private sector:

Participant 10: "SACIA can be able to be that middleman for us for government and private companies when we do corporate events or even sporting events or any other events also maybe just being in touch."

SACIA has a voice for the progress of the subsector as articulated participant 3 below:

Participant 3: "In terms of the voice and SACIA's responsibility to the sector and the stakeholders, and in terms of digital development."

Participant 13: "From a digitisation point of view, perhaps they could play this advisory role to say, this is what exists. This is where the world is evolving to and how do we then make sure that South Africa gets on par with the rest of the world or even better."

Participant 4: “The more members we have that speak with the SACIA voice and that we represent the stronger that influence, especially on government, will be to enforce things, to move in a particular direction.”

SACIA's members view the association's past role centred around the support-based role they have been providing, the role of “middlemen” as well, and it served and continues to serve as the ‘voice of progress’ in the digital transformation of the subsector which supports the position of Chaskin and Richman (1992) and Tschirhart (2006: 523) who highlighted the need for institutions to support and help associations and groups achieved their aims.

The findings suggest that the transition to a digitally driven model requires robust infrastructure. As such, SACIA can guide members on balancing immediate infrastructure needs with the gradual adoption of digital tools. This includes offering insights into cost-effective solutions, partnerships and phased implementation plans to avoid overwhelming organisations with upfront costs or operational disruptions. As part of the future support required for the digital transformation of the subsector as a means of sustainability, the participants suggested that SACIA should help balance process and procedure for its members in the digital transformation of the subsector:

Participant 8: “One of the things we've had to do is improve our technological infrastructure to make it ready or already in the venues so that it's a lot easier for situations.”

The following views on infrastructural transformation emerged:

Participant 7: “Technology has a role to play. I think we as participants and event organisers have to coach people into understanding that the technology is not going to make them a success at it.”

The current research findings show that balancing digital and infrastructure transformation is a task SACIA's members must embark on to ensure that the digital transformation of the subsector is attained and sustained. This finding is broadly supported by the work of Bounfour (2016), which centres on digital futures and digital

transformation where the author stresses the importance of infrastructural transformation, as well as the position held by Henfridsson and Bygstad (2013: 907) in his study on the generative mechanisms of digital infrastructure evolution.

Financial support emerged as a significant barrier for many members in adopting digital solutions. SACIA can assist by securing sponsorship deals and government grants, ensuring that members have access to the necessary resources. Financial support is essential for investments in costly infrastructure and modern technology.

As part of the future support required for the digital transformation of the subsector as a means of sustainability the participants expressed that sponsorship and funding are requested from SACIA's members:

Participant 7: "It's a virtual game then there should be a better package for the sponsorship because sponsorship cost a lot of money, but if we can put packages together for sponsors to get more visibility, it could subsidise the costs at the digital events."

Participant 8: "The purpose of that funding would be to aid us in creating employment or more people within the industry to want to come into this industry because people are now running away. To kind of help people get to the finish line."

SACIA's role can be strengthened with assisting members in securing funding. Previous studies have demonstrated that sponsorship and funding can encourage digital transformation as shown by Chanias, Myers and Hess (2019: 17), similar to Fuchs et. al (2019: 198) in their study characterising approaches to digital transformation, where emphasis is placed on funding for digital development. These findings reflect the position of Thomson (2020: 205), who argue that sustainable practices often provide financial benefits over time, despite the upfront investment.

The current research findings align with those obtained above as it shows the future support required by SACIA members for the digital transformation of the subsector.

Members have also expressed the need for specialised training programmes and certifications that focus on digital tools and platforms. Tailored workshops and courses can help members enhance their technical skills and stay updated on best practices for utilising technologies such as VR, AR and AI. Certifications and training of industry professionals boost individual competence, enhances the credibility of the industry and assists in reducing unemployment in the country:

Participant 9: “From my point of view, really, it's skills anticipation. When we look at if we're going to go in this direction, what skills do we anticipate the industry is going to need and who's going to be delivering those skills? Who's going to be the quality assurance conversation also comes in. So, for me it's really having that Authority position in industry, we need to have a regulator for the professionals that are going to be working in the digital events space. Specialising in sporting because that's a unique space. Even on the continent where people go and learn? Skills like that, but those are employable skills. Those are skills that allow people to earn, so if we're transitioning into the digital sporting space, that is an opportunity where we need to do an anticipation now and then we start looking at who's going to now be delivering the learning they're assessing and also just the monitoring and evaluation for the sector.”

Participant 1: “Unemployment does play a massive role most countries do have a certain level of unemployment, but ours are scary in South Africa compared to other countries. I think the massive one that we can't avoid is like Participant 3, saying unemployment, that's a massive drawback.”

Participant 7: “Yeah, the sharing of the knowledge, the certification, all that sort of stuff can only help the industry.”

5.5 CROSS THEME SYNTHESIS

An important observation across all themes was the interconnectedness between digital transformation and sustainability where digital tools were frequently seen as enablers for sustainable practices, particularly in reducing resource use (for example, paperless tickets, online fan engagement) and enhancing communication about sustainability initiatives. Participants confirmed that without the digital transformation

catalysed by the pandemic, efforts to promote sustainability might have been delayed. This supports the argument made by Shehadeh (2024: 29) that digital transformation can act as a catalyst for broader industry changes, including sustainability. Figure 5.6 illustrates this observation.

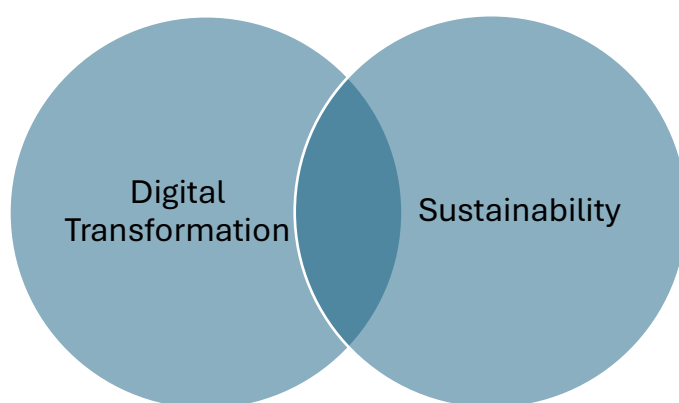


Figure 5.6: Interconnectedness between digital transformation and sustainability

(Source: Author's compilation)

Now that the key themes of the study have been explored, the findings are contextualised within the theoretical framework, by illustrating how VR, AR and AI are disrupting the sport events subsector.

5.6 LINK TO THEORETICAL FRAMEWORK

The disruptive innovation theory by Clayton Christensen explains how new technologies initially serve niche markets or underperform compared to traditional solutions but eventually redefine or disrupt established industries by creating new markets or value networks (Strömberg & Thorman, 2019: 2). The findings of the present study align closely with the tenets of the disruptive innovation theory by demonstrating how digital technologies such as VR, AR and AI are challenging traditional business models, reshaping consumer engagement and altering the value proposition in the sport events subsector (Kivimaa et al., 2021: 111).

SACIA members perceive VR, AR and AI as redefining the sport events subsector as it disrupts traditional live and broadcast formats by creating virtual and hybrid

environments. According to King and Baatartogtokh (2015: 80) four key elements of disruptive innovation theory must be satisfied.

Firstly, for an innovation to be classified as disruptive, incumbents must already be improving on their use of existing technologies known as sustaining innovations. SACIA members recognised the role of existing digital technologies such as live streaming and virtual tools (Zoom, Microsoft Teams) in maintaining business continuity during the COVID-19 pandemic. These technologies represent sustaining innovations, as they have improved operational efficiency and allowed the sport events subsector to continue engaging with audiences despite restrictions on physical gatherings.

The second requirement is that the innovation must exceed current market needs. The study reveals that, although digital transformation and the virtual realm have been widely embraced, advanced technologies such as AR and AI may exceed the immediate needs or expectations of audiences. The reluctance of some SACIA members to adopt AI, due to fears of job displacement and high implementation costs, highlights the overshooting of customer needs.

The third tenet to be satisfied is the emergence of a disruptive innovation to which incumbents can respond. Although some industry players have begun experimenting with VR, AR and AI, the study findings indicate that widespread adoption is still in its early stages, especially within the South African context as there are various barriers preventing the adoption.

The fourth tenet is that disruptive innovations leave incumbent firms 'floundering' as they are disrupted. The research finds that majority of stakeholders in the sport events subsector have struggled to keep pace with rapid digital transformation due to financial constraints, lack of digital expertise and resistance to change. The absence of a clear strategic roadmap for technology adoption has left organisations vulnerable to disruption. Without proactive intervention, such as SACIA's support in lobbying for funding, providing skills training and promoting industry-wide collaboration, some incumbents may find themselves unable to compete in an increasingly digital landscape. Further, the adoption of VR, AR and AI have challenged traditional business models and altering the value proposition of sport events in the following ways. Traditional sport events rely on in-person attendance and linear broadcasting.

VR and AR challenge the current model by allowing globally dispersed fans to "attend" virtually, often at lower associated costs. Similarly, AI disrupts manual processes by offering cost-effective and more efficient solutions such as e-ticketing, rendering traditional approaches less competitive (Ur Rehman, 2024: 101). Another interesting finding of the research which strongly supports the position of disruptive innovation theory shows that not all disruption comes from breakthrough technologies, rather, innovations that increase the affordability or accessibility of goods and services, opening them up to a wider audience, which was achieved during COVID-19 pandemic (Bower & Christensen, 1996: 75). SACIA members believe that VR and AR are expanding the market by making events accessible to fans who cannot afford or physically attend or participate.

AR merchandise and AI- driven advertising unlock additional revenue streams for the subsector. The disruptive innovative theory projects an integration of new and existing ideals for improved economic benefits which is line with the findings of the current research and the future support that is required for the digital transformation of the subsector as a means of sustainability through sponsorship and funding (Christensen, Raynor & McDonald, 2013).

Disruptive innovations often face resistance initially due to perceived risks, high costs, or uncertainty about return on investment (Osiyevskyy & Dewald, 2015: 58). However, as the adoption of VR, AR and AI increase and the technologies mature, they may displace incumbent practices. The sport events subsector mirrors this pattern as VR, AR and AI are integrated into mainstream practices. This study successfully demonstrated how SACIA members perceive and adapt to these transformative technologies by examining the digital transformation of the sport events subsector through the lens of the Disruptive Innovation Theory, fostering sustainability post-COVID-19.

5.7 SUMMARY

Chapter Five presented a discussion on the findings of the study, examining SACIA members' perceptions of digital transformation within the sport events subsector. Four primary themes, which are challenges during COVID-19, digital transformation

and innovation, sustainability and SACIA's role, emerged from the data. Each theme was analysed deeper to understand the members' experiences, the barriers and opportunities presented by a digital shift, and the critical role that SACIA must play in supporting its members through such a transformation. Using inductive thematic analysis, the findings of the study highlight how disruptive technologies like VR, AR and AI could reshape the subsector and also revealed the strategic support that is required from SACIA as a body to help its members overcome challenges and drive the long-term resilience of the sport events subsector. The next and final chapter concludes this dissertation and offers actionable recommendations, providing a clear path forward for future researchers and industry professionals alike.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

This chapter summarises the key findings of the study and provides a synopsis of the research that was undertaken. The conclusion drawn from the research clearly describes the perceptions of SACIA members regarding the sustainability of the sport event subsector through digital transformation, thereby answering the research question posed in Chapter One and addresses the objectives.

Recap of research question: *What are the perceptions of SACIA members regarding the sustainability of the sport event subsector through digital transformation?*

Figure 6.1 revisits the orientation and flow of the research.

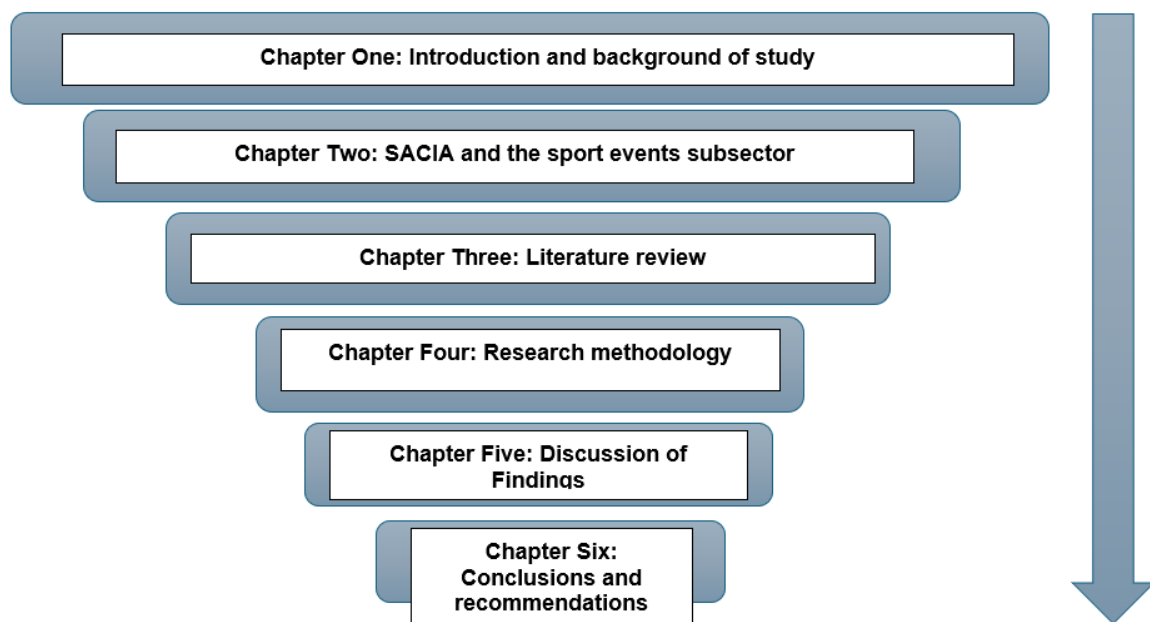


Figure 6.1: Orientation and flow of research

(Source: Author's compilation)

Chapter One introduced the topic and provided the background and context for the study by defining digital transformation and positioning it as a tool for sustainability in the sport event subsector. A preliminary literature review sourced from academic articles, textbooks, Google Scholar, ScienceDirect, Emerald and EBSCOhost

highlighted a lack of focused research on perceptions of digital transformation within the sport events subsector as a means of sustainability particularly within the South African context. The formulation of the problem statement, along with the primary and secondary research objectives, emerged from this gap, as well as from the need for improved sustainability and resilience strategies for the subsector following the unprecedented impact of the COVID-19 pandemic, which catalysed the shift to digital platforms to maintain operational continuity during the lockdowns. Given that SACIA represents one of the largest business associations in the events sector, it was deemed appropriate to explore the members perceptions of digital transformation as a means of sustainability for their subsector. The research methodology and sampling strategy were briefly outlined in Chapter One.

Chapter Two focused on SACIA and its role within the events sector, recognising the association's influence and representation of professionals in the field. A detailed discussion of the South African events sector was provided by first contextualising the broader events sector, followed by a breakdown of the various subsectors including business events and entertainment events, and identifying the sport events subsector as a major component. A brief history of the evolution of sport events was presented to help visualise current trends and anticipate future directions, especially considering the growing digital transformation and sustainability imperatives.

Chapter Three reviewed existing literature on digital transformation and innovation and provided a comprehensive definition and background to these concepts as strategic tools for sustainability. The chapter specifically explored disruptive technologies such as VR, AR and AI, examining their applications and potential to transform the sport events subsector. It was further discussed how these technologies can be leveraged to build more resilient, engaging and sustainable event experiences in the future, positioning digital innovation as a critical driver of long-term success in the evolving sport events landscape.

Chapter Four described the research methodology that was implemented to achieve the primary objective of the study that was proposed in Chapter One. The research methodology was guided by the layers provided by Saunders, Lewis and Thornhill's research onion. Sampling and data collection strategies, together with the process

undertaken to analyse data gathered through online focus groups, were discussed in detail. The chapter concluded with a discussion of the ethical procedures followed during this study to ensure that all ethical standards were adhered to as required by the University of South Africa.

The findings of the study were outlined in detail in Chapter Five, supported by verbatim quotes from participants. The findings were categorised into four major themes which are: *challenges encountered during the COVID-19 pandemic, digital transformation and innovation, future sustainability of the sport events subsector, and SACIA's role*. The chapter concluded with a detailed description of each theme and any sub-themes identified.

Chapter Six begins with a review of the primary and secondary research objectives as a reminder of what the study aimed to achieve. Conclusions drawn from the literature review as well as the qualitative findings relating to the primary objective of the study are outlined, and each secondary research objective is discussed. Recommendations based on the research findings are presented, and Chapter Six concludes with a discussion of the limitations of the study.

6.2 RESEARCH OBJECTIVES

The primary objective of this study was to explore the perceptions of SACIA members regarding how digital transformation can assist with the future sustainability of the sport events subsector in response to the challenges resulting from the COVID-19 pandemic. This has been achieved through the application of qualitative methods. Data was gathered through online focus groups with SACIA members allowing for an in-depth understanding of their experiences, challenges, and aspirations concerning DX within the sport events subsector.

The secondary objectives of the study were:

- To explore the nature of the challenges that SACIA members have experienced in the sport events subsector during the COVID-19 pandemic

- To explore the perceptions of SACIA's members as to the nature of any digital transformations that have taken place in the sport event subsector to bring sport events to supporters during the COVID-19 pandemic.
- To explore the alternative technologies that the members of SACIA believe could be introduced to enhance the sustainability of their subsector post COVID-19, such as virtual reality, augmented reality and artificial intelligence.
- To explore the views of SACIA's members as to the association's past role and the future support required for the digital transformation of the subsector as a means of sustainability.

The findings addressing each objective is summarised below.

6.3 SUMMARY OF FINDINGS

Secondary objective one was achieved through the focus group discussions by allowing participants to share their personal and professional experiences of challenges faced in the sport events subsector during the COVID-19 pandemic. The key challenges that emerged from the analysis included financial and economic losses, emotional and psychological stress and a lack of social interaction and community as indicated by the findings of the research.

Secondary objective two was achieved by examining the SACIA members' perceptions of the digital transformations that took place during the COVID-19 pandemic. The study revealed that live streaming, together with virtual tools such as Zoom and Microsoft Teams, were instrumental in sustaining operations and audience engagement during periods of restricted physical gatherings. These technologies allowed sport organisations to continue hosting events and enabled remote participation amid restrictions and created alternative revenue streams by simultaneously enabling stakeholder engagement and honouring sponsorship obligations. Digital technology employed during the COVID-19 pandemic allowed work in the subsector to continue.

SACIA members further recognised the efficiency and accessibility provided by the application of digital tools, noting that they not only facilitated business continuity but also expanded audience reach beyond traditional event spaces. However, although these technologies proved beneficial in the short-term, participants also acknowledged the need for further advancements such as integrating immersive experiences through virtual and augmented reality to enhance long-term engagement. The findings of the study emphasised that digital transformation was not merely a temporary solution for challenges during the pandemic but a catalyst for ongoing innovation in the sport events subsector.

Secondary objective three was similarly achieved by revealing the SACIA members' perceptions of the alternative technologies that could be introduced to support the long-term sustainability of the sport events subsector. The findings represented a strong belief that the integration of VR and AR hold the potential to promote audience engagement, improve event accessibility and enhance the appeal of sport events. These technologies were perceived as key drivers of innovation, enabling immersive and interactive experiences that could extend the reach of sport events beyond physical venues. By reducing reliance on in-person attendance, VR and AR were identified as solutions to challenges related to scale, cost and geographic constraints, ultimately broadening market opportunities and promoting inclusivity in sport events. In contrast, mixed sentiments were noted regarding the adoption of AI. Some members recognised the capacity of AI to enhance operational efficiency, optimise decision-making and improve audience personalisation, while other members expressed concerns regarding its impact on employment within the industry. Given the already high unemployment rate in South Africa, apprehensions were raised about AI-driven automation potentially displacing jobs, particularly in areas that rely on human expertise. However, there was acknowledgment that AI could be integrated responsibly with adequate regulatory frameworks, workforce reskilling initiatives and industry support from SACIA and government institutions leading to the achievement of secondary objective four.

Finally, secondary objective four was achieved by identifying the support that is needed from SACIA to overcome barriers to DX and ensure that the subsector remains sustainable. This support entails the need for a stronger advocacy role, representing

member interests at industry and governmental level, including lobbying for policies that promote DX while ensuring that regulatory frameworks align with the evolving technological landscape. SACIA can help shape an enabling environment that fosters innovation and growth by acting as a bridge between industry stakeholders and policymakers.

In addition to advocacy, SACIA's advisory role is crucial in guiding members through the complexities of DX. As technology continues to evolve, many businesses require structured support to make informed decisions regarding the adoption and implementation of digital tools. Members have indicated the need for standardisation in the form of clear guidelines, best practices and strategic recommendations to maximise the benefits of DX and mitigate the risks.

To address the financial burden associated with the cost of DX especially for SME's, SACIA must play a role in lobbying for grants, government subsidies and tax incentives that can alleviate financial limitations. Tax breaks on digital infrastructure investments, funding programmes for technology adoption and incentives for businesses that upskill employees in DX-related competencies could significantly reduce cost barriers and encourage a broader adoption.

Training and professional development remain key priorities for SACIA members. As DX continues to reshape the subsector, SACIA must expand its training initiatives and offer recognised qualifications to ensure that professionals remain competitive in an increasingly digital landscape. Members have expressed the need for specialised training programmes in VR, AR and AI, data analytics, and live-streaming technologies, among others. By providing structured learning opportunities and industry-recognised designations, SACIA can empower its members to leverage technology effectively while maintaining professional credibility within the sector.

A balanced approach such as described above demonstrates the importance of strategic collaborative efforts to harness the potential of disruptive technologies while mitigating the risks in maintaining the subsector's relevance and future sustainability, especially concerning the challenges faced during the COVID-19 pandemic. In successfully addressing the secondary objectives above, this study has achieved the

primary objective set out to explore the perceptions of SACIA members regarding how digital transformation can assist with the future sustainability of the sport events subsector, thereby providing a comprehensive response to the research question. These insights provided a thorough understanding of how SACIA members perceive and navigate DX as a tool for future sustainability of the sport events subsector, thereby achieving the primary objective of the study.

6.4 CONTRIBUTION TO KNOWLEDGE

The study's contribution to knowledge lies firstly in academia as it fills the research gap that was highlighted in the literature and sets the foundation for future researchers to build on this knowledge of digital transformation as a means of sustainability in the sport events subsector in South Africa. Secondly, the study's findings contribute to the innovation and sustainability of the sport events industry against future threats and other circumstances that may render the subsector unable to operate. The findings of the study illuminate key dynamics and provide a solid foundation for further investigation. These findings suggest emerging trends, challenges and opportunities that merit deeper exploration to understand their implications fully. The analysis highlights how digital transformation tools like VR, AR and AI are reshaping practices within the sport events subsector, prompting a need to evaluate their broader impact on relevant factors such as employment, fan engagement, or revenue models.

6.4.1 Theoretical contributions

The theoretical contributions of this study lie in advancing the understanding of how disruptive innovation theory applies to the digital transformation of the sport events subsector, particularly in the South African context. The research highlights how innovations serve as disruptive forces by examining technologies like VR, AR and AI, which are reshaping traditional business models and operational frameworks.

This study expands on Clayton Christensen's Disruptive Innovation Theory by illustrating how DX not only introduces novel technologies but also forces stakeholders to re-evaluate existing practices and adapt to new market demands. Specifically, the findings from this study demonstrate that although tools like VR and AR can enhance

fan engagement and event sustainability, their integration requires overcoming barriers such as cost, infrastructure limitations and skill gaps. Additionally, the mixed perceptions surrounding AI underscore the tension between technological advancement and other socio-economic challenges like unemployment.

The study provides a localised perspective on disruptive innovation, demonstrating how such theories can be contextualised to address regional and industry-specific challenges. This is a valuable contribution for scholars seeking to refine the theory and for practitioners aiming to implement sustainable technological innovations in dynamic and resource-constrained environments.

6.5 IMPLICATIONS FOR PRACTICE

The findings of this study emphasise the transformative potential of technologies such as VR, AR and AI to enhance sustainability, improve fan engagement and create innovative revenue streams.

VR and AR can simulate immersive sport experiences, and allow fans to virtually attend events, explore stadiums, or interact with athletes. This is particularly valuable for attracting younger technologically savvy audiences and creates a global reach for local events. For example, AR-based mobile apps could provide real-time statistics or player interactions during games.

Live streaming platforms, combined with ticket sales for virtual attendance, offer an alternative revenue stream. This model proved effective during the pandemic and can be refined for hybrid events. Event organisers can bundle digital passes with merchandise to create a comprehensive fan experience.

AI can help optimise event logistics, from ticket sales forecasting to personalised marketing campaigns. Chatbots and virtual assistants can improve customer service, while AI-driven analytics can refine decision-making processes for event organisers. Industry practitioners should explore partnerships with AI providers to pilot these tools to ensure sustainability through DX. Digital tools also reduce the need for physical

travel, lowering the carbon footprint of events. For example, virtual marathons or cycling events can be promoted as eco-friendly alternatives to traditional formats. Organisations can market these initiatives to align with global sustainability goals and attract eco-conscious sponsors.

6.6 RECOMMENDATIONS

The following recommendations aim to bridge the gap between theory and the real-world implementation.

6.6.1 Academic recommendations

Future academic research could explore several related areas to advance our understanding of DX in the sport events subsector. One critical focus is examining the integration of emerging technologies such as VR, AR and AI in event management, particularly the effects on fan engagement, operational efficiencies and accessibility. There is also scope to explore the scalability of these technologies across different event sizes, from community-based activities to international mega-events. Furthermore, the financial impact of adopting advanced technologies warrants analysis, including cost-benefit evaluations for stakeholders and the potential for sponsorships and government interventions to mitigate the cost of adoption. Future research could explore longitudinal effects, the scalability of identified solutions and cross-industry comparisons to provide a more comprehensive understanding of the topic. Such investigations would enrich the existing body of knowledge and equip stakeholders with actionable insights to navigate ongoing transformations effectively.

Socio-cultural dimensions also present a significant avenue for exploration, particularly how cultural attitudes, generational divides and digital literacy influence technology adoption. Studying the psychological effects of virtual events on audiences and athletes could provide insights into maintaining community and engagement in digital formats. Additionally, the sustainability and environmental implications of digital platforms merit further attention, particularly the reduction of carbon emissions through virtual events and the potential integration of green technologies.

Despite existing research, gaps persist in the current literature. There is limited localised research on the unique challenges and opportunities of DX in developing countries, particularly in the African context, where affordability and infrastructure readiness remain significant barriers. The role of AI in sport management also remains underexplored, particularly regarding ethical and social concerns such as unemployment and skills. Furthermore, the long-term sustainability of technologies adopted during the COVID-19 pandemic in a post-pandemic era has not been thoroughly investigated. Finally, the role of digital literacy initiatives in bridging gaps for marginalised communities to participate in virtual sport events is another area lacking sufficient research. Addressing these gaps could refine strategies for sustainable and inclusive digital transformation in the sport events subsector.

6.6.2 Practical recommendations

Moving beyond academia, the practical implications of this research extend to the sport events subsector and industry associations. Recommendations for the sport events subsector to embrace digital transformation with a focus on the disruptive potential of VR, AR and AI technologies are given below.

Incorporate VR and AR to create immersive hybrid events that blend live experiences with digital access to expand the reach to global audiences.

Use AI-driven analytics and recommendation engines to deliver personalised content, offers and experiences to fans. AI can enhance fan experience by tailoring content based on individual preferences to make the digital experience feel more customised, relevant and engaging. This can drive loyalty and deepen the connection with audiences.

Offer training for employees, athletes and event organisers to understand and utilise VR, AR and AI. Building digital literacy among stakeholders ensures that disruptive technologies are effectively integrated and maximised to promote an adaptive and future-ready sport events sector.

Explore digital revenue opportunities, such as virtual ticketing, in-app purchases and VR-exclusive content that extends beyond live events. Digital platforms can generate new revenue streams, enhancing accessibility, reducing costs and supporting the sector's financial sustainability.

Strengthen the digital infrastructure to support seamless streaming, VR and AR functionality and real-time AI analytics during events. Investing in reliable digital infrastructure is crucial for maintaining high-quality experiences, reducing barriers to participation and enabling innovative technologies to perform optimally.

Design digital event platforms and VR/AR experiences with accessibility features to ensure inclusivity for fans with disabilities. This can enhance the subsector's appeal to a diverse audience, fostering greater community involvement and supporting equity within the sport events subsector.

Use AI for fraud detection, monitoring fan interactions and ensuring secure ticketing and transactions. AI can protect both the subsector and fans by reducing risks associated with digital engagement, raising trust and making digital experiences safer for all stakeholders.

The above recommendations seek to balance immediate applications of VR, AR and AI with long-term planning and emphasis on inclusivity, accessibility and sustainability to ensure that the subsector thrives in a rapidly transforming digital landscape.

6.6.3 Strategic Recommendations

Strategic recommendations to SACIA leadership to support members through digital transformation, especially in leveraging disruptive technologies like VR, AR and AI for the sustainability of the sport events subsector.

Develop and sponsor workshops and formal qualifications and certifications focused on cultivating digital transformation skills, covering VR, AR, AI and digital event management. Equipping members with essential skills will enhance their confidence

and capability to integrate disruptive technologies effectively and prepare them for future industry demands.

Establish a platform where SACIA members can share best practices, case studies, and insights from their experiences in adopting new technologies. A knowledge-sharing network creates a sense of community that encourages collaborative learning, helps members to navigate challenges and gain insights into effective digital transformation practices.

Partner with VR, AR and AI technology providers to offer SACIA members discounted access or trial programmes for these tools. This will reduce cost barriers making it easier for members to experiment with new technologies without heavy financial commitments, driving a wider adoption within the industry.

Advocate for financial support in the form of grants, government subsidies, or industry funding to assist members in financing the adoption of digital solutions.

Access to financial support will help members manage the costs of digital infrastructure, software and training, which are essential for adopting and sustaining digital transformation efforts.

Develop and disseminate industry-wide standards and guidelines for implementing VR, AR and AI, to ensure consistent and ethical use. Promoting standardised practices will support members in adopting technologies confidently, ensuring that new digital practices align with industry norms and regulatory requirements.

Initiate pilot programmes that allow members to test VR, AR and AI technologies in real-world scenarios before full adoption. Pilots offer a controlled environment for experimentation, helping members assess the feasibility and impact of these technologies without full-scale investment or risk.

Provide resources, including guides and tools, to help members navigate through potential data security and privacy challenges as they adopt digital tools. Ensuring data protection builds trust with audiences and stakeholders critical for successful digital transformation and maintaining the integrity of the sport events subsector.

Encourage strategic planning and long-term visioning. Members should create digital transformation roadmaps that align with both short-term and long-term goals. A clear transformation plan will help members set priorities, manage resources effectively and ensure their digital strategies align with evolving industry trends and audience needs.

By implementing the above recommendations, SACIA leadership may be able to create a supportive environment that not only enables members to adopt VR, AR and AI but also helps to strengthen the overall sustainability and growth of the sport events subsector against future threats that may arise.

6.7 STUDY LIMITATIONS

Although the research has successfully addressed the outlined objectives, no study exists without limitations (Ni, 2024: 1754).

Since the study focuses on SACIA members, the sample may not fully represent the range of perspectives within the broader sport events subsector, particularly from stakeholders outside the association. This limitation could influence the depth of understanding of the challenges and perceptions around DX across the wider industry. However, since the purpose of the study is to explore and not to generalise or infer, the sample was deemed adequate. The study also employs a purposive sampling method, which means that participants were selected based on their relevance to SACIA and their involvement within the sport events subsector. While this method ensures that participants are knowledgeable and directly involved in the objectives of the study, it inherently limits the diversity of perspectives by focusing solely on those already engaged with SACIA. The purposive sampling approach may also introduce bias, as it excludes industry professionals outside SACIA or with differing levels of DX experience. Future research could consider expanding the sample to include a random or stratified selection from the broader sport events industry to provide a more balanced view across different stakeholder groups. This would help in achieving more comprehensive insights into digital transformation needs and challenges in the subsector.

A limitation regarding time constraints and the evolving nature of technology was noted. DX and technology adoption are both rapidly evolving areas. The study captures a snapshot based on current perspectives, which may become outdated as technologies like VR, AR and AI progress and as the subsector adapts further post COVID-19. The findings of the research reflect a specific point in time, limiting their relevance if applied in a significantly changed technological or industry landscape. These constraints open doors for future scholars to refine and expand upon this work.

6.8 CONCLUSION

Chapter Six concludes the research by re-addressing the primary and secondary research objectives, directly answering the research question and synthesising key insights. The primary objective, which was to explore the perceptions of SACIA members regarding the digital transformation of the sport events subsector as a means of sustainability, was effectively met through qualitative data that revealed strong support for digital tools in enhancing operational resilience, audience engagement and the long-term viability of the sport events subsector. Each of the four secondary objectives were equally fulfilled through inductive thematic analysis and cross-comparison supported by relevant academic literature. Strategic and academic recommendations based on the findings of the research were provided in this chapter. Despite limitations acknowledged in the study, the study contributes original insights into an under-researched area and provides a foundation for future academic inquiry and strategic practice in digital event innovation. This chapter concludes the study by affirming the critical role of digital transformation in shaping the sustainability and strategic direction of the sport events subsector in South Africa.

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APPENDICES

APPENDIX A: GATEKEEPER PERMISSION LETTER



Southern African Communications Industries Association (NPC)
M16 Ticketpro Dome, cnr Northumberland & Olievenhout Roads, Northriding, 2162, Gauteng, South Africa
☎ +2711 083 6418 🌐 www.sacia.org.za
Registration No: 2009/019625/08

18 June 2024

Researcher's Name: Karishma Ramsaroop
Student Number: 43573916
Institution: University of South Africa

Dear Karishma,

Subject: Permission Granted for Research at SACIA

This letter serves to inform you that your request to conduct research at SACIA has been reviewed and approved. We appreciate your interest in *“Exploring member's perceptions of the sustainability of the sport events subsector through digital transformation in response to the challenges resulting from the COVID-19 pandemic: The Case of The Southern African Communications Industry Association”* within our organisation.

Your commitment to adhering to ethical standards and ensuring minimal disruption to our daily operations is noted and appreciated. We trust that you will conduct your research in a professional manner and treat any data collected with confidentiality and respect.

SACIA undertakes to provide you with relevant member contact details and a letter of introduction to members to confirm that SACIA is aware of and approves of the research.

If you require any assistance or further clarification during your study, do not hesitate to contact us.

We hope that your research will yield valuable insights and contribute positively to the advancement and knowledge of the events sector.

Thank you for choosing SACIA as the location for your research project. We wish you all the best in your endeavours.

Yours sincerely,

Gatekeepers Name: Mr. Kevan Jones (CEO)

Kevan@sacia.org.za

APPENDIX B: ETHICAL CLEARANCE CERTIFICATE



College of Economic and Management Sciences_ERC Marketing and Retail Management

Date: 15/07/2024

Dear: Ms Karishma Ramsaroop

**Decision: Ethics Approval from
15/07/2024 to 15/07/2027**

NHREC Registration # : (if applicable)

Ref #: 2311

Name: Ms Karishma Ramsaroop

Student #: 43573916

Staff #:

Researcher: Ms Karishma Ramsaroop

85 Fountain Road

Johannesburg

43573916@mylife.unisa.ac.za 0820792775

Supervisor: Mr Michael du Toit Dtoitm3@unisa.ac.za

Co-Supervisor: Dr Zwanga Mposi mposizs@unisa.ac.za

Co-Researcher(s):

Email address:

**EXPLORING MEMBER'S PERCEPTIONS OF THE SUSTAINABILITY OF THE SPORTS EVENTS
SUBSECTOR THROUGH DIGITAL TRANSFORMATION IN RESPONSE TO CHALLENGES
RESULTING FROM THE COVID-19 PANDEMIC: THE CASE OF SACIA**

Qualification: MCom

Thank you for the application for research ethics clearance by the College of Economic and Management Sciences_ERC Marketing and Retail Management for the above mentioned research study Ethics approval is granted for three years.

The **low-risk application** was **reviewed** by College of Economic and Management Sciences_ERC Marketing and Retail Management on 26/06/2024 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment.

The proposed research may now commence with the provisions that:

1. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
2. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the College of Economic and Management Sciences_ERC Marketing and Retail Management.
3. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
4. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made

with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.

5. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
6. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data requires additional ethics clearance.
7. No field work activities may continue after the expiry date (15/07/2027). Submission of a completed research ethics progress report will constitute an application for renewal, for Ethics Research Committee approval.

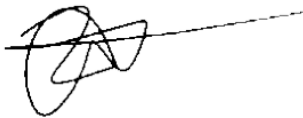
Additional Conditions

1. Disclosure of data to third parties is prohibited without explicit consent from Unisa.
2. De-identified data must be safely stored on password protected PCs.
3. Care should be taken by the researcher when publishing the results to protect the confidentiality and privacy of the university.
4. Adherence to the National Statement on Ethical Research and Publication practices, principle 7 referring to Social awareness, must be ensured: "Researchers and institutions must be sensitive to the potential impact of their research on society, marginal groups or individuals, and must consider these when weighing the benefits of the research against any harmful effects, with a view to minimising or avoiding the latter where possible." Unisa will not be liable for any failure to comply with this principle.

Note

The reference number 2311 should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Kind regards,



Mr N Mkhize
Chair of College of Economic and Management Sciences_ERC Marketing and Retail Management
E-mail: emkhizn@unisa.ac.za



Professor Maelekanyo Christopher MULAUDZI
Executive Dean / By delegation from the Executive Dean of College of Economic and Management Sciences_ERC Marketing and Retail Management
E-mail: tshilmc@unisa.ac.za

APPENDIX C: PARTICIPANT INFORMATION SHEET AND INFORMED CONSENT



PARTICIPANT INFORMATION SHEET

Ethics clearance reference number: #2311

Research permission reference number (if applicable):

07/08/2024

Title: Exploring SACIA members' perceptions of digital transformation and sustainability in the South African sport events subsector post COVID-19

Dear Prospective Participant

My name is Karishma Ramsaroop and I am doing research under the supervision of Mr. Michael du Toit and Dr Zwanga Mposi, senior lecturers in the Department of Marketing and Retail Management, towards a Master of Commerce degree in Business Management at the University of South Africa (UNISA).

We are inviting you to participate in a study entitled: *Exploring SACIA members' perceptions of digital transformation and sustainability in the South African sport events subsector post COVID-19*

WHAT IS THE PURPOSE OF THE STUDY?

The study involves exploring the use of possible digital solutions that can be employed in the sport events subsector to mitigate against future pandemics and other threats that may render the events sector unable to operate normally. SACIA is one of the largest industry associations operating within the communications and events sector in Southern Africa. The COVID-19 pandemic and the subsequent lockdown

restrictions imposed by government left many of SACIA's members without work. Members turned to SACIA for support during this time. This 2

study will generate deeper insight into the support that is required from SACIA so that the association will be able to provide greater value for its members.

WHY AM I BEING INVITED TO PARTICIPATE?

SACIA has been identified as one of the largest industries associations operating within the communications and events sector in Southern Africa. Many of the SACIA members were directly affected by the inability of the events sector to operate normally during the pandemic and turned to SACIA for support during this crisis. SACIA has a total of approximately 400 members that operate within the sector. A sample size of approximately thirty members will be purposively selected to participate in the focus groups.

WHAT IS THE NATURE OF MY PARTICIPATION IN THIS STUDY?

The study involves online focus groups of 60 to 90 minutes long comprising of informal discussions guided by a moderator. Each focus group will consist of 6 participants.

CAN I WITHDRAW FROM THIS STUDY EVEN AFTER HAVING AGREED TO PARTICIPATE?

Participation in this study is voluntary, and you are under no obligation to consent to participation. If you do decide to take part, you will be given this information sheet to keep and be asked to sign a written consent form. You are free to withdraw at any time and without giving a reason, however it may not be possible to withdraw from the study once the focus group has been conducted. Personal data will be anonymised by the researcher to protect the identity of the participant.

WHAT ARE THE POTENTIAL BENEFITS OF TAKING PART IN THIS STUDY?

This study will generate deeper insight into the support that is required from SACIA so that the association will be able to provide greater value for its members as well as contribute to the future sustainability of the events industry.

ARE THERE ANY NEGATIVE CONSEQUENCES FOR ME IF I PARTICIPATE IN THE RESEARCH PROJECT?

The study is a low-risk direct human participant involvement study. The only foreseeable risk of harm is the potential for minor discomfort or inconvenience, thus research that would not pose a risk above the everyday norm. Participants' personal information and identities will be protected according to POPIA.

WILL THE INFORMATION THAT I CONVEY TO THE RESEARCHER AND MY IDENTITY BE KEPT CONFIDENTIAL?

You have the right to insist that your name will not be recorded anywhere and that no one, apart from the researcher and identified members of the research team, will know about your involvement in this research [*this measure refers to confidentiality*] OR your name will not be recorded anywhere and no one will be able to connect you to the answers you give [*this measure refers to anonymity*]. Your answers will be given a code number, or a pseudonym and you will be referred to in this way in the data, any publications, or other research reporting methods such as conference proceedings [*this measure refers to confidentiality*].

Only the researcher and the supervisory team will have access to the data derived from the focus groups. This information will be stored on the researcher's personal computer under password protection and be destroyed after a period of five years.

De-identified data may be used for research-related purposes, such as a research report, journal articles and/or conference proceedings. Privacy will be protected in any publication of the information [for example *A report of the study may be submitted for publication, but individual participants will not be identifiable in such a report*]. Please keep in mind that it is sometimes impossible to make an absolute guarantee of confidentiality or anonymity when focus groups are used as a data collection method. An online focus group is a facilitated discussion between a group of participants that belong to a common group, association or share a common interest or characteristic. While every effort will be made by the researcher to ensure that you will not be connected to the information that you share during the focus group, I cannot guarantee that other participants in the focus group will treat information confidentially. I shall, however, encourage all participants to do so. For this reason, I advise you not to disclose personally sensitive information in the focus group.

HOW WILL THE RESEARCHER(S) PROTECT THE SECURITY OF DATA?

Data derived from the focus groups will be stored by the researcher in a password protected folder for a minimum period of five years on the researcher's personal computer. Only the researcher and the supervisory team will have access to the data. Future use of the stored data will be subject to further Research Ethics Review and approval if applicable (such as using the data for a purpose unrelated to the initial aim and objectives or the study). Data will be permanently deleted from the hard drive of the computer using a relevant software programme after a period of five years.

WILL I RECEIVE PAYMENT OR ANY INCENTIVES FOR PARTICIPATING IN THIS STUDY?

There are no financial incentives or rewards offered for participating in this study. The cost incurred by the participants is the cost of data for joining the online focus groups.

HAS THE STUDY RECEIVED ETHICS APPROVAL?

This study has received written approval from the Research Ethics Review Committee of the College of Economic and Management Sciences, Marketing and Retail Management, UNISA. A copy of the approval letter can be obtained from the researcher if you so wish.

HOW WILL I BE INFORMED OF THE FINDINGS/RESULTS OF THE RESEARCH?

If you would like to be informed of the final research findings, please contact Karishma Ramsaroop on 082 079 2775 or email 43573916@mylife.unisa.ac.za. The findings are accessible for five years.

Should you require any further information or want to contact the researcher about any aspect of this study, please contact Karishma Ramsaroop on 082 079 2775 or email 43573916@mylife.unisa.ac.za.

Should you have concerns about the way in which the research has been conducted, you may contact Mr. Michael Du Toit on 012 429 4453, email address Dtoitm3@unisa.ac.za or Dr. Zwanga Mposi on 012 429 6626, email address mposizs@unisa.ac.za. Contact the research ethics chairperson of the College of Economic and Management Sciences for Marketing and Retail Management, Mr Njabulo Mkhize, at the following e-mail address: emkhizn@unisa.ac.za if you have any ethical concerns.

Thank you for taking time to read this information sheet and for participating in this study.

Thank you.

Karishma Ramsaroop

CONSENT TO PARTICIPATE IN THIS STUDY

I, _____ (participant name), confirm that the person asking my consent to take part in this research has told me about the nature, procedure, potential benefits and anticipated inconvenience of participation.

I have read (or had explained to me) and understood the study as explained in the information sheet.

I have had sufficient opportunity to ask questions and am prepared to participate in the study.

I understand that my participation is voluntary and that I am free to withdraw at any time without penalty (if applicable).

I am aware that the findings of this study will be processed into a research report, journal publications and/or conference proceedings, but that my participation will be kept confidential unless otherwise specified.

I agree to the recording of the focus groups.

I have received a signed copy of the informed consent agreement.

Participant Name & Surname..... (please print)

Participant Signature..... Date.....

Researcher's Name & Surname...Karishma Ramsaroop..... (please print)

Researcher 'signature..... Date 07/08/2024.....

APPENDIX D: ONLINE FOCUS GROUP QUESTION GUIDE

1. Welcome and Introduction (5 minutes):

- Welcome participants and icebreaker.
- Welcome to this focus group session. Please note that this session is going to be recorded.

The purpose of this focus group is to gather insights from SACIA's members about their perceptions of digital transformation within the sport events subsector. This exploration is crucial to understanding if and how digital tools and technologies such as VR, AR and AI can be used to enhance the subsector's sustainability and resilience in response to the challenges faced during the COVID-19 pandemic. I know that not all of you here today may belong to the sport subsector, you may answer in the broader events context or what you perceive to be issues within hosting sport events.

To protect the identities of participants you are not required to introduce yourselves. A few ground rules for today's session, this a small group, you don't need to be formal and raise your hand, it's a general discussion, floor is open to all.

Are there any questions before we begin?

To lighten the mood lets kick things off with a short ice breaker: keeping in line with the theme of sport, please share with us who your favourite sport personality of all time is?

Objective 1: Explore SACIA members' perceptions of digital transformations in the sport events subsector (20 minutes):

2. Current digital transformations (10 minutes):

- What are some of the challenges you have faced professionally during the COVID-19 pandemic as members of SACIA?
- Have you observed or experienced any examples of digital changes/transformations during the lockdowns? Briefly explain the nature of these changes.

3. Impact on sustainability (10 minutes):

- In your opinion, how have these digital transformations influenced/impacted the sustainability of the sport events subsector?

- Are there any specific aspects of the digital changes that you believe have particularly contributed to the sustainability of the sport events subsector during COVID-19?

Objective 2: Explore the alternative technologies that the members of SACIA believe could be introduced to enhance the sustainability of their subsector post COVID-19, such as virtual reality, augmented reality and artificial intelligence (20 minutes):

4. Identifying Alternative Technologies (10 minutes):

- What alternative technologies do you believe could be introduced to enhance the sustainability of the sport events subsector post-COVID-19?
- In your opinion, do VR, AR and AI have a future in the sport events subsector? How could these technologies be particularly impactful for sustaining the sector against future pandemics and other threats?

5. Feasibility and Implementation (10 minutes):

- How feasible do you think the implementation of these alternative technologies is within the South African context?
- What potential challenges or opportunities do you foresee in adopting these technologies for the sustainability of the sport event subsector?

Objective 3: Explore SACIA members' views on the association's past role (15 minutes):

6. Past Role in digital transformation (10 minutes):

- How do you view SACIA's past role in digitally transforming the sport events subsector? What support is necessary from SACIA to aid members in such a transformation?
- Are there any initiatives or strategies implemented by SACIA in the past that you found particularly effective?

7. Learnings and improvements (5 minutes):

- Based on past experiences, how can SACIA improve on what has been done during the Covid- 19 Pandemic to support its members?

Objective 4: Explore SACIA Members' views on the association's future role (15 minutes):

8. Future role in digital transformation (10 minutes):

- Looking ahead, what role do you see SACIA playing in the potential digital transformation of the sport events subsector?
- Are there specific areas or strategies you believe SACIA should focus on in the future?

9. Expectations and contributions (5 minutes):

- What are your expectations from SACIA in terms of its future contributions to the digital transformation of the sport events subsector, and how do you as members of SACIA see yourself actively contributing to these efforts?

Closing: 10. Final thoughts and next steps (5 minutes):

Any final thoughts or insights?

I have sent you a participant information sheet yesterday, please sign it and send it back to me.

I would once again like to express my gratitude for participating in the study. Thank you for your time and have a great day!

APPENDIX E: SACIA CODE OF PROFESSIONAL CONDUCT

Honour	Showing respect for myself, my organisation, my industry and the community of clients that I serve by behaving in a manner that reflects favourably on my profession. Acting above reproach. Avoiding compromise of professional judgement by conflicts of interest.
Integrity	Acting with honesty and openness. Displaying trustworthiness. Showing consistent good behaviour over time. Ensuring that my words and actions correspond.
Reliability	Undertaking what I am competent to do and fulfilling commitments that I have made to my organisation, my industry and the community of clients that I serve
Honesty	Being truthful and accurate when executing my job even when it sometimes might be difficult. Not misrepresenting my own or my associate's academic or professional qualifications. Only undertaking assignments that I am competent to perform by way of my education, training and experience.
Accuracy	Ensuring that what I say, do and write are correct and reflect the information that is required to complete the job. Where this is not possible, ensuring that my organisation or my client understand the factors that could influence the accuracy of the information I have provided.

SACIA identifies that a practitioner interacts with various stakeholders when delivering their services. To this end, it is important that professional conduct be upheld when engaging with colleagues, peers, employers as well as industry role-players. To this end, a practitioner needs to uphold certain **principles** when practicing in this industry, namely:

Avoiding conflict of interest	This means understanding when a conflict of interest arises and speaking up to the parties present about the possible conflict to ensure that my integrity and honesty are not brought into question. This includes opportunities when I might be given information that I could use to my own advantage, but that could undermine my integrity and honesty.
Building and enhancing relationships	When acting in the best interest of my client, my focus is on building and enhancing long term relationships that are built on trustworthiness and reliability.

Upholding safety, health and welfare of the public As a competent practitioner who is proficient in what I do, I have the required insight and understanding into the laws, codes and principles governing safety, health and welfare of the public within my area of responsibility. I therefore ensure that the work I complete is compliant with these laws, codes and principles to ensure the well-being of my client, as well as the public that I affect.

Remaining in good standing As a practitioner in this industry, I need to remain in good standing in terms of the laws governing South Africa. I also need to ensure that I abide by the codes set out by international counterparts within this industry.

Finally, it is important that I realize that the certificates, logos and marks entrusted to me as a member of SACIA remain their property. Should, for any reason, our relationship be terminated, I am responsible to return this property to their care.

I, _____ (full name) (ID No.: _____)
do hereby agree to abide by the SACIA Code of Professional Conduct.

Signature _____ Date _____

APPENDIX F: AUTO-ETHNOGRAPHIC REFLECTION

As I reflect on the journey of exploration and inquiry that was undertaken in this study, I acknowledge the valuable insights gained through the exploration of the SACIA member's perceptions that contribute to the broader understanding of the digital transformation of the sport events subsector as means of sustainability. This has simultaneously been the most challenging as well as the most rewarding and gratifying experience of my life. To my fellow scholars who seek to undertake a similar endeavour, I shall leave you with ***"The Recipe for Success"***:

Yields: One empowered, purpose-driven scholar

Prep Time: Years of growth | Cook Time: Endless curiosity

Ingredients:

- 2 heaping tablespoons of determination (non-negotiable)
- 1 generous cup of sleepless nights mixed with early mornings
- A handful of curiosity (the more, the better!)
- 3 teaspoons of constructive self-doubt (keeps the ego in check)
- A pinch of fear — balanced by courage
- 4 ounces of feedback — stirred, not taken personally
- ½ cup of failure (crucial for flavour)
- A full ladle of support from mentors, friends, and family
- 6 drops of humor (to prevent burnout)
- A dusting of gratitude
- A whole lot of purpose

Method:

1. Preheat your mindset to "growth" — expect mistakes, welcome learning.
2. In a large bowl, mix determination and perseverance until smooth. Add curiosity slowly while stirring gently with intention.
3. Fold in your failures carefully; they add depth and wisdom. (Do *not* discard!)
4. Beat in feedback — it may sting, but it's your academic yeast. Let rise.
5. Add a pinch of fear — but counter it with purpose and a bold heart.
6. Bake in a high-pressure environment. Expect discomfort but let the process transform you.
7. Cool with reflection. Decorate with milestones, publications, lightbulb moments, or breakthroughs at 3 AM.

Serving Suggestion:

Serve with humility, share freely with others, and savour every bite of growth- even the bitter ones.

Final Note:

Greatness isn't about perfection; it's about staying in the kitchen when things burn, boil over, or fall flat — and still believing that the next batch might just change everything.

In closing, this study marks a significant step forward and we remain mindful of the ever-evolving nature of research in the endless pursuit of knowledge and innovation to continuously refine our understanding of the living world. I extend my gratitude to all those who contributed to this endeavour and invite future scholars to build upon this foundation, cultivating a collective journey toward greater insights and advancements in the events sector.

APPENDIX G: CONFIRMATION OF PROFESSIONAL EDITING



Federal University Lokoja, Kogi State, Nigeria

Department of English and Literary Studies,

James.udaa@fulokoja or jimudaa@yahoo.com

+2348034637320, +2347055165487

26th June, 2025

TO WHOM IT MAY CONCERN

I write to confirm that I have reviewed and edited the academic paper titled: **“Exploring Member Perception of the Sustainability of the Sport Event Subsector through Digital Transformation in Response to Challenges Resulting from the COVID-19 Pandemic: The Case of Southern African Communications Industry Association”**, by Karishma Ramsaroop, student number 43573916.

The editing process involved careful attention to grammar, clarity, coherence and overall flow, while ensuring that the author’s original ideas and arguments remained intact. The dissertation was also checked for consistency in formatting, referencing and adherence to academic writing standards. Where necessary, suggestions were made to improve the structure and expression of key points to enhance readability and scholarly impact.

Please consider this letter as formal confirmation that the dissertation has undergone professional language editing.

Disclaimer: The editor cannot be held responsible for any errors introduced due to changes being made to the document after the editing is complete.

Sincerely,

A handwritten signature in blue ink, appearing to read 'James I. Udaa'.

James I. Udaa, PhD

APPENDIX H: TURNITIN REPORT

Similarity Report

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Dissertation Complete.docx

AUTHOR

KARISHMA RAMSAROOP

WORD COUNT

39442 Words

CHARACTER COUNT

228167 Characters

PAGE COUNT

135 Pages

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992.1KB

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