



SCI-BONO DISCOVERY CENTRE NPC STRATEGIC PLAN

2024/25 - 2028/29

envisioning TOMORROW



GAUTENG PROVINCE
EDUCATION
REPUBLIC OF SOUTH AFRICA





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LIST OF ABBREVIATIONS

AR	AUGMENTED REALITY
CEO	CHIEF EXECUTIVE OFFICER
GDE	GAUTENG DEPARTMENT OF EDUCATION
HR	HUMAN RESOURCES
IDEA	INCLUSION, DIVERSIFICATION AND EQUITY ACCESS
MOU	MEMORANDUM OF UNDERSTANDING
MGSLG	MATTHEW GONIWE SCHOOL OF LEADERSHIP AND GOVERNANCE
MST	MATHEMATICS, SCIENCE AND TECHNOLOGY
NPC	NON-PROFIT COMPANY
NPO	NON-PROFIT ORGANISATION
PBO	PUBLIC BENEFIT ORGANISATION
PESTEL	POLITICAL, ECONOMIC SOCIAL, TECHNOLOGY, ENVIRONMENTAL AND LEGAL
PSET	POST-SECONDARY EDUCATION AND TRAINING
SADC	SOUTH AFRICAN DEVELOPMENT COMMUNITY
SCM	SUPPLY CHAIN MANAGEMENT
SALT	SOUTHERN AFRICAN LARGE TELESCOPE,
SKA	SQUARE KILOMETRE ARRAY
SSIP	SECONDARY SCHOOL IMPROVEMENT PROGRAMME
STEAM	SCIENCE, TECHNOLOGY, ENGINEERING, ARTS AND MATHEMATICS
STEM	SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS
STREAM	SCIENCE, TECHNOLOGY, RESEARCH, ENGINEERING, ARTS, AND MATHEMATICS
SWOT	STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS
TVET	TECHNICAL VOCATIONAL EDUCATION AND TRAINING
VR	VIRTUAL REALITY

OFFICIAL SIGN-OFF

It is hereby certified that this Strategic Plan:

- Was developed by the management of Sci-Bono Discovery Centre under the guidance of the Board of Directors
- Takes into account all relevant policies, legislation and other mandate for which Sci-Bono Discovery Centre is responsible
- Accurately reflects the outcomes which the Sci-Bono Discovery Centre will endeavour to to achieve over the period 2024/25-2028-2029

Prof. Mfanelo Ntsobi
Chief Executive Officer



Approved by:

Mr Abbey Witbooi
Board Chairman



PART A

OUR GUIDING MANDATES

This part of the strategic plan begins with the Constitution of the Republic of South Africa and Regional and International Development priorities that the country is a signatory to. It outlines critical legislative and relevant mandates that guide Sci-Bono's strategic planning and operational environment.

1. INTERNATIONAL AND REGIONAL DEVELOPMENT PRIORITIES GUIDING OUR MANDATE

South Africa is a signatory to various international and regional treaties and agreements. As a sovereign state, it actively participates in regional and global forums, aligning its priorities with broader developmental agendas to benefit its citizens and the continent.

In the Southern African Development Community (SADC) context, education and skills development are crucial in fostering human development, addressing regional challenges, and promoting industrialisation and poverty alleviation. Consistently, as an NPC operating in South Africa within the education and development sector, Sci-Bono Discovery Centre NPC draws alignment to the following priorities:

1.1 African Union's Agenda 2063 Priorities

South Africa, as an AU member, aligns with the following priorities:

- Sustainable and Inclusive Economic Growth: Fostering economic development that benefits all citizens.
- Human Capital Development: Investing in education, skills, and health.
- Agriculture and Agro-Business Development: Enhancing value addition and promoting Agro-processing.
- Employment Generation: Especially targeting youth and women.
- Social Protection: Ensuring social safety nets for vulnerable populations.
- Gender and Youth Empowerment: Promoting equality and empowerment.
- Good Governance: Building capable institutions and ensuring transparency

1.2 Priorities guiding STREAM education in SADC countries

- Protocol on Education and Training:
- The Protocol on Education and Training, established in 1997, serves as a foundational document for SADC's education sector. It outlines areas of cooperation among member states, including policy formulation, primary education, intermediate education, and training.
- The Regional Indicative Strategic Development Plan (RISDP) 2020-2030
- The first strategic goal of the Sci-Bono Discovery Centre Strategy for 2024/25-2028/29 responds to the RISDP 2020-2030 by focusing on "increasing access to quality and relevant education and skills development, including science and technology, for SADC citizens." This RISDP goal aims to enhance equitable access to education and skills development, fostering industrialisation similar to the SBDC's strategic goal 1 for 2024/25-2028/29.
- The Strategic Framework on Education for Sustainable Development
- The SADC Education for Sustainable Development (ESD) Strategic Framework supports transformative learning across formal and informal education and training systems for sustainable development. It emphasises sustainable futures and relevant skills development.

1.3 Relevant Sustainable Development Goals

- SDG Goal 4: Quality Education underscores the importance of quality education, including STREAM subjects, to empower individuals, bridge gaps, and contribute to a better world.

- The goal aims to reduce disparities in both access and quality of education. It prioritises vulnerable populations, including poor children, those in rural areas, persons with disabilities, indigenous people, and refugee children.

Key Indicators:

- 4.1.1 Proportion of children and young people achieving minimum proficiency levels in reading and mathematics.
- 4.2.2 Proportion of children aged 24-59 months developmentally on track in health, learning, and psychosocial well-being.

2. CONSTITUTIONAL MANDATE

The mandate of the Sci-Bono Discovery Centre, NPC, draws guidance from the Constitution of the Republic of South Africa (Act 108 of 1996), as amended. To this end, the following Sections of the Constitution bear reference:

Right to Basic Education:

- Section 29(1) of the RSA Constitution states that everyone has the right to a basic education, including primary and secondary education.
- This provision ensures that education is accessible to all, regardless of socioeconomic status or background.

Equitable Access:

- Section 29(2) emphasises that education must be provided in a manner that promotes equitable access.
- It prohibits discrimination based on race, gender, religion, language, or other grounds.

Quality Education:

- Section 29(3) outlines the right to quality education.
- It places a responsibility on the state to ensure that educational institutions meet specific standards.
- Language of Instruction:
- Section 29(4) recognises the right of learners to receive education in the official language or languages of their choice.
- This provision supports multilingual education and cultural diversity.
- Independent Schools and Homeschooling:
- Section 29(5) acknowledges the right of parents to choose independent schools or to

homeschool their children.

- It respects parental autonomy in educational decisions.

Higher Education and Further Education:

- Section 29(6) extends the right to higher education and further education.
- It emphasises the importance of lifelong learning.

Educational Institutions:

- Section 29(7) outlines the principles that govern educational institutions.
- These principles include democratic governance, participation, and accountability.

Educational Funding:

- Section 29(8) states that the state must take reasonable measures to make education progressively available and accessible.
- It highlights the importance of adequate funding for education.

Promotion of STREAM Education:

- While not explicitly mentioned, the RSA Constitution's focus on quality, equity, and access indirectly supports promoting STREAM education.
- Ensuring a solid educational foundation contributes to a skilled science, technology, engineering, arts, and mathematics workforce.

3. THE NATIONAL DEVELOPMENT PLAN, VISION 2030

As part of the country's civic society players, Sci-Bono aligns itself with the provisions of the NDP Vision 2030, which was adopted by the Cabinet of the Republic of South Africa in 2012. The NDP's overarching goal is to eliminate poverty and significantly reduce inequality in the country by 2030. To this end, the NDP identifies five key elements that are essential to achieving this goal:

- inclusive social and economic development.
- sustainable investment and growth.
- decent jobs and sustainable livelihoods.
- a capable developmental state.
- and expanding opportunities.

4. LEGAL STATUS

Sci-Bono is a registered Non-Profit Company (NPC) under the Companies Act 71 of 2008, registration number 2004/010183/08. It is also registered as a PBO under the Income Tax Act 58 of 1962, with PBO reference number 930 014 449.

The Sci-Bono Discovery Centre NPC is a registered Non-Profit Organisation (NPO) with the Department of Social Development under the Non-Profit Organisations Act 71 1997. Its registration number is 056-334-NPO. As an NPO, the Sci-Bono Discovery Centre NPC receives grants and donations from various stakeholders, including the private and public sectors and the local and international donor community. These funds support programmes and projects that align with the organisation's mandate.

Additionally, the organisation's Memorandum of Incorporation provides the following as Sci-Bono's objectives:

- Promote and improve science, technology, and innovation, as well as public awareness and interest in science and technology.
- To support and improve mathematics, science and technology education and skills development; and
- To promote career interests in science, engineering, and technology, primarily in the Gauteng Province.

5. LEGISLATIVE AND POLICY MANDATES

The following legislative and policy mandates impact, in some way or other, on the daily functioning of Sci-Bono:

TABLE 1: LEGISLATIVE AND POLICY MANDATES

CATEGORY	INSTRUMENT
NATIONAL	• Constitution of the Republic of South Africa, 1996 • National Education Policy, 1996 • The National Development Plan's Vision 2030 • Education Vision 2025 • The Basic Education Sector Plan • Integrated Strategic Planning Framework for Teacher Development 2011 – 2025 • South Africa Schools Act, 1996 • Department of Science and Innovation's Science Engagement Strategy
PROVINCIAL	• Gauteng Schools Education Act, 1995, as amended • Gauteng Education Policies as amended • Gauteng Department of Education Science, Technology, Research, Reading, Engineering, Arts, and Mathematics (STREAM) Strategy • GDE Roadmap 2019 – 2024
CORPORATE GOVERNANCE	• The Companies Act, 2008 • The Occupational Health and Safety Act of 1995 • The Income Tax Act, 1962 • The Labour Relations Act, 1995 • The Basic Conditions of Employment Act, 1997 • The Promotion of Access to Information Act, 2000 • The Employment Equity Act, 1998 • King IV Code of Corporate Governance • The NGO Profit Act, 1997 • Other organisation-specific legislation and policies

The legislation mentioned above, and policies are not exhaustive. It is recognised that Sci-Bono must comply with all national and provincial legislation and regulations and all municipal by-laws applicable to its functions or the area in which it operates.

6. INSTITUTIONAL POLICIES

The following Table summarises the approved institutional policies that guide the operations and decision-making at Sci-Bono.

TABLE 2: SCI-BONO INSTITUTIONAL POLICIES

FINANCE MANAGEMENT POLICIES	HUMAN RESOURCES MANAGEMENT POLICIES	OTHER INSTITUTIONAL POLICIES
• Anti- Fraud Bribery, Corruption and Sanctions Policy • Code of Conduct for SCM Practitioners • Delegations of Authority Policy • Disclosure of Interest Policy • Finance Policy • Investment Policy • Performance Monitoring of Suppliers Policy • SCM Blacklisting Policy • SCM Committee for Competitive Bids Policy • Stewardship and Donor Recognition Policy • Supplier Service Desk (Accounts Payable SOP) • Supply Chain Management Policy • Fraud and Corruption Policy	• Bursary Policy • Code of Ethics Policy • Communications Policy • Confidentiality and Non-Disclosure Policy • Digital Transformation Framework Policy • Disciplinary Policy • Electronic and Digital Policy • Environmental Policy • Grievance Policy • Health and Wellness Management Policy • Hybrid Remote Work Policy • Leave Policy • Retirement Policy • Safety, Health and Environmental Policy • Sexual Harassment Policy • Substance Abuse Policy • Employee Equity Policy • Employee Retention Policy • Work from Home Policy	• Business Continuity Policy • Child Protection Policy • Covid-19 Policy • Enterprise Risk Management Framework • IT Governance Policy • Job Evaluation Policy • Monitoring and Evaluation Policy • Organisational Social Investment Policy • Partnership Policy • Performance Management and Development System Policy • Remuneration Policy • Research Policy • Retention Framework • Risk Appetite and Tolerance Framework • Risk Management Policy

7. RELEVANT COURT RULINGS

No specific court rulings in South Africa have been publicly reported to have a significant, ongoing impact on the Sci-Bono Discovery Centre's operations or service delivery obligations. However, the institution will stay informed about legal developments affecting its activities, including legislation, regulations, or court decisions related to education, science and technology, intellectual property, labour laws, and health and safety standards.

PART B

OUR STRATEGIC FOCUS

8. VISION

A world-class Science Centre capacitated to foster a culture of Science and Technology by making it fun, exploratory, innovative and responsible.

9. MISSION

“To empower society through innovative and interactive Science, Technology, Research, Engineering, Arts and Maths (STREAM) education that fosters curiosity and discovery.”

10. VALUES

At Sci-Bono, our core values guide our organisational culture and inform how we engage all stakeholders internally and externally. Our core values are:

A	S	I	I	E	E
ACCOUNTABLE	STAKEHOLDER CENTRISM	INTEGRITY	INNOVATION	ETHICAL	EMPATHY
We take responsibility for our actions and decisions, ensuring transparency and reliability in all our endeavours. We are committed to delivering on our promises and continuously improving our performance.	We prioritise the needs and expectations of our stakeholders, including visitors, partners, and the community. By actively engaging with and listening to them, we create meaningful and impactful experiences.	We uphold the highest standards of honesty and ethical behaviour. Our commitment to integrity ensures that we provide accurate and trustworthy information, fostering a culture of respect and trust.	We embrace creativity and forward thinking to drive scientific discovery and educational excellence. We remain at the forefront of science education by fostering an environment encouraging experimentation and new ideas.	We adhere to ethical principles in all operations, from research and exhibits to partnerships and community engagement. Our ethical approach ensures that we contribute positively to society and the environment.	We understand and value the diverse perspectives and experiences of our visitors and staff. By fostering empathy, we create an inclusive and supportive environment that encourages curiosity and learning.

11. SITUATIONAL ANALYSIS

11.1 Historical Background

Sci-Bono Discovery Centre NPC was incorporated in 2004 as a partnership between the GDE and various private sector partners, including the academic sector. The organisation supports science, technology, mathematics, and related subjects to help build South Africa's mathematics, science, engineering, and technology capacity. Visitors can engage with the NPO's interactive science and engineering activities collection.

Sci-Bono is in the historic Electric Workshop in Newtown, Johannesburg's cultural precinct. It offers a range of science and technology events, activities, and programmes for the public and schools. Sci-Bono is one of the most popular leisure and educational destinations in Gauteng. As an affiliate of the GDE, Sci-Bono is involved in departmental educational programmes to improve teaching and learning in Mathematics, Science and Technology and the integration of digital technology and resources throughout Gauteng's school system.

11.1.1 Sci-Bono Functional Areas

The Sci-Bono Discovery Centre is an essential institution that catalyses scientific teaching and learning in South Africa. It plays a pivotal role in fostering and nurturing scientific curiosity, promoting education in Science, Technology, Research, Engineering, and Mathematics (STREAM) fields, and shaping the future of the country's workforce. Through its innovative programmes and exhibitions, the Centre inspires and engages learners of all ages, encouraging them to pursue their interests and careers in scientific fields. Its contributions to advancing STREAM education and developing the country's workforce are invaluable, and it continues to be a beacon of knowledge and discovery for generations to come.

1. Core Business of Sci-Bono Discovery Centre NPC:

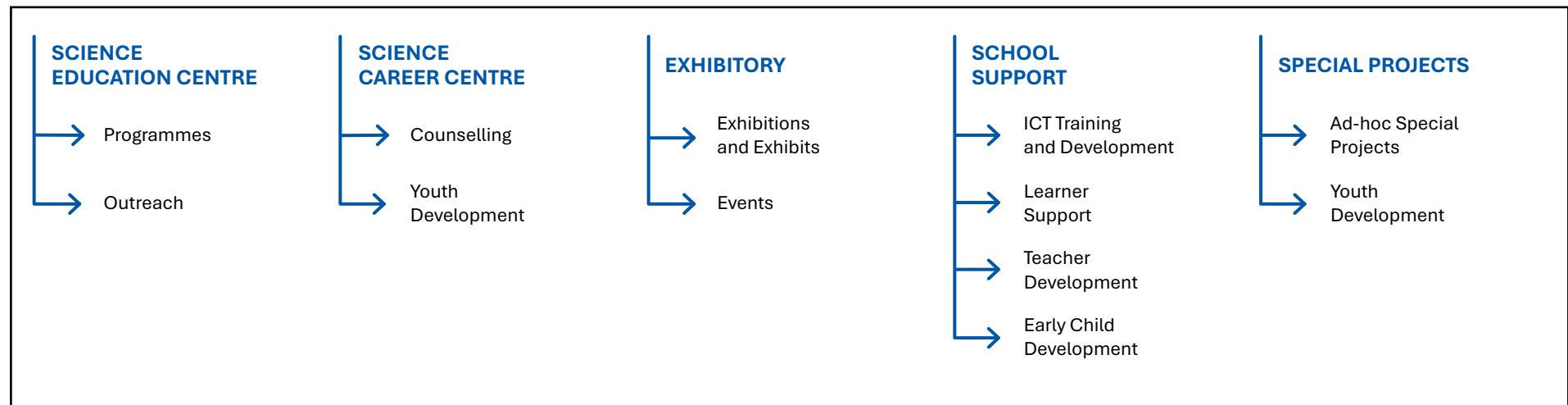


FIGURE 1: SCI-BONO'S CORE FUNCTIONS

- a. **Science Education Centre:** Sci-Bono is a hub for science research, innovation (4IR) and development. In line with the SAASTA Framework for the Accreditation of Science Centres, Sci-Bono focuses on science education, awareness and science communication, benchmarking, collaborations, and peer participation.
- b. Sci-Bono also serves as an **educational hub** where learners of all ages engage with interactive exhibits, workshops, and programmes related to science, technology, research, reading, engineering, and mathematics (STREAM).
- c. **Exhibitory:** With over 400 interactive exhibits, Sci-Bono provides a stimulating environment for hands-on learning, sparking curiosity and fostering scientific inquiry from early childhood to post-school education and development.
- d. **Science Career Centre:** The Centre actively promotes careers in STREAM fields and inspires future scientists, engineers, and technologists.
- e. **School Support Unit:** Sci-Bono collaborates with schools, offering support in curriculum implementation, teacher training, and educational resources to foster improved education and development outcomes in STREAM and related gateway subjects
- f. **Teacher Training and Development:** Sci-Bono enhances teaching quality by providing professional development opportunities for educators.
- g. **ICT Academy:** The Centre equips learners and educators with globally accredited multi-certification programmes in information and communications technology (ICT) skills.

2. Sci-Bono's Role in Education and Development:

- a. **Implementing Gauteng's STEAM Strategy:** Sci-Bono is responsible for implementing

the Gauteng Mathematics, Science, and Technology Education Strategy. It aligns with national educational goals and contributes to building a competent South Africa in the global world of science and technology

- b. **Skills Development:** The Centre's R350-million project addresses the province's maths, science, and technology skills development. It contributes to a skilled workforce and economic growth².
- c. **Equitable Access:** By catering to over 650,000 visitors annually, including foundation phase education level, secondary school learners through to post-education and training level, and local and international visitors, Sci-Bono bridges educational gaps and ensures equitable access to quality STEAM.

11.1.2 Stakeholder Analysis Informing the Strategic Plan

To achieve its strategic objectives, Sci-Bono must prioritise effective mobilisation of donor support, uphold an astute management of stakeholder relationships, and foster effective partnerships.

The organisation establishes and maintains a reliable and consistent flow of resources and support to foster sustainability. This will enable the organisation to maintain its operations and effectively serve its target populations. These must address stakeholders identified in the Sci-Bono mandate and others that may influence achieving the organisation's vision and mission. To this end, the organisation's stakeholder management efforts must include an enhanced focus on stakeholder needs and competitor intelligence.



The following table reflects critical stakeholder considerations:

KEY STAKEHOLDER GROUP	KEY PROJECTS / PROGRAMMES REQUIRED TO MEET THE EXPECTATIONS OF THE STAKEHOLDER GROUP
Sci-Bono beneficiaries - Teachers - Learners - Youth - Visitors	- Achieve goals and objectives and create meaningful impact. - Socio-economic benefits realised, e.g. alleviation of poverty and unemployment through education. - Proactively package and communicate Sci-Bono services to reach a wider audience. - Close the skills gap. - Empower beneficiaries.
Spheres of government - National - Provincial - Local	- Awareness of national and provincial programmes and linkages to Sci-Bono. - Meaningful participation in relevant fora. - Align programmes with policies and strategies, particularly of the GDE. - Participate in broader planning structures and champion the Sci-Bono agenda.
Strategic partners - Funders - Research organisations - MGSLG - Sector education and training authorities	- Creation of enhanced, clear competitive advantage. - Development of strategic capabilities. - Clean and fair competition. - Positioning Sci-Bono as a critical part of attaining skills development objectives.
Suppliers	- Payment of service providers on time. - Negotiate SLAs with performance requirements. - Efficient supply chain processes – fair, transparent and fast. - Focus on regional suppliers/ contractors. - Effective management of SLAs and vendors. - Strengthen enterprise development focus and support. - Improve contract negotiation, management and reporting. - Consistency in the application of standards. - Improved compliance and rating on BBB-EE status.

TABLE 3: SCI-BONO KEY STAKEHOLDERS

KEY STAKEHOLDER GROUP	KEY PROJECTS / PROGRAMMES REQUIRED TO MEET THE EXPECTATIONS OF THE STAKEHOLDER GROUP
Communities	• Empowerment through 4IR education. • Job creation and opportunities for enterprise development. • Skills development and placement opportunities for PSET and other vulnerable groupings
Media	• Enhanced understanding and awareness of science communication and education. • Improved skills and expertise in science journalism. • Collaborations to advance access and equity in STREAM. • Advertising – print and electronic.
Sci-Bono Board	• Execute the Sci-Bono mandate. • Sound and defensible performance reporting. • Sound corporate governance. • Enhance collaboration in the delivery of the strategic plan.
Employees and Organised Labour	• Involvement and consultation on all matters affecting labour. • Implementation of HR policies and procedures. • Investigate and re-align the structure in line with the strategy. • Streamline various administration processes. • Good conditions of employment. • Employee personal growth. • A challenging and dynamic working environment. • Fair and equitable remuneration systems. • Secured and sustained sense of employment. • Labour harmony and collaboration. • Upholding the organisational values.



11.2 Sci-Bono Organisational Structure

After approving the 2024/25-2028/29 corporate strategy, the management team has to embark on an organogram realignment. The corporate strategy outlines the long-term goals and objectives of the organisation. To achieve these goals, the organisation's structure must support the plan.

A revised organogram ensures that every organisational role is clearly defined and aligned with the strategic objectives. This clarity helps avoid overlaps and gaps in responsibilities, which can lead to inefficiencies.

An updated organisational structure enhances communication channels and coordination among different departments. This is crucial for the seamless execution of the corporate strategy. Aligning the organogram with the corporate strategy helps in the optimal allocation of resources, including human resources. It also ensures that the right people are in the right roles to drive the strategy forward. Understanding how their roles contribute to the overall strategy can boost their engagement and morale. This further keeps employees motivated and committed to achieving the strategic goals.

To this end, the management team must review the organisational structure for Board approval to ensure sufficient support for the 2024/25-2028/29 Strategic Plan.

11.3 Industry Trends

The following is a brief overview of the trends within the science and technology education sector globally, continentally (focusing on Africa), nationally (South Africa), and across its nine provinces.

11.3.1 Global Trends

Globally, science and technology centres are evolving

rapidly to meet the demands of the 21st century. There is a growing emphasis on interactive and immersive experiences, leveraging Augmented Reality (AR) and Virtual Reality (VR) technologies to engage visitors. Sustainability and environmental consciousness are central themes, with centres incorporating green technologies and educating the public on climate change and renewable energy. Additionally, there is a trend towards collaboration with research institutions and industry partners to showcase cutting-edge innovations and foster a science and technology entrepreneurship culture.

In recent years, the number of scholarly publications on Science, Technology, Engineering, and Mathematics (STEM) education has also increased rapidly, supporting the field's development. Integrated Science, Technology, Research, Reading, Engineering, Arts, and Mathematics (STEAM) education is the most recent proposal for improving the teaching and learning of the disciplines referred to by the acronym from kindergarten onwards.

11.3.2 Regional Trends

The Science Centre industry in Africa is relatively young and emerging, with about 50 science centres and museums operating in 20 African countries, reaching approximately five (5) million visitors annually. The Science Centre industry in Africa faces some specific factors and trends, such as:

- Focus on addressing local challenges such as water scarcity, sustainable agriculture, and health issues.
- There is a push to increase accessibility and inclusivity, reaching out to underserved communities and schools to spark interest in science and technology careers. Investment in science and technology is critical to an African economic boom.
- Less than 25% of African higher education students pursue STEM-related career fields
- There is a need for and potential for science education

and development, as Africa has a large and growing population of young people who can benefit from the opportunities and challenges of science and technology and contribute to their advancement and innovation in Africa and the world.

- The diversity and richness of science, culture, and heritage, as Africa is a continent with a long and varied history and tradition of scientific knowledge and practice, as well as a vibrant and dynamic contemporary scientific community and activity that can inspire and inform the science centre industry in Africa.
- The lack and gap of science infrastructure and resources, as Africa is a continent with many social and economic constraints and inequalities that limit the availability and accessibility of science facilities and equipment, as well as the quality and quantity of science professionals and educators, that can support and sustain the science centre industry in Africa.
- The vision and ambition of science integration and cooperation, as Africa is a continent with a shared and common goal of achieving the African Union's Agenda 2063, which emphasises the importance and role of science, technology and innovation for the transformation and development of Africa, and calls for the establishment and strengthening of the Science, Technology and Innovation Strategy for Africa (STISA-2024), which includes the promotion and support of the science centre industry in Africa.

11.3.3 South Africa

The Science Centre industry in South Africa is a leading and established industry, with about 20 science centres and museums operating in South Africa, reaching about 2 million visitors annually. The Science Centre industry in South Africa reflects some specific factors and trends, such as:

- The legacy and reality of science policy and governance, as South Africa has a history and experience of using science and technology for political and ideological purposes, such as apartheid and nuclear weapons, as well as for social and economic purposes, such as democracy and development, that shape and influence the science centre industry in South Africa.
- The excellence and reputation of science research and innovation, as South Africa has a solid and competitive scientific performance and output. It is also a host and partner of some of the world’s most prestigious and cutting-edge scientific projects and initiatives, such as the Square Kilometre Array (SKA) and the Southern African Large Telescope (SALT), that attract and involve the science centre industry in South Africa.
- The challenge and opportunity of science education and outreach, as South Africa is a country with a large and diverse population of learners and educators who face many barriers and difficulties in accessing and achieving quality and relevant science education, as well as a potential and demand for improving and enhancing science literacy and engagement, that motivate and challenge the science centre industry in South Africa.

- The aspiration and contribution of science imagination and creativity, as South Africa is a country with a rich and varied culture and heritage of scientific knowledge and practice, as well as a source and destination of scientific ideas and stories that inspire and inform the science centre industry in South Africa.

11.3.4 Provincial Trends

1. **Gauteng:** Home to Sci-Bono Discovery Centre, Gauteng is at the forefront of interactive science education, focusing on technology and innovation.
2. **Western Cape:** The Cape Town Science Centre is a leader in providing hands-on science experiences and strongly emphasises environmental education.
3. **KwaZulu-Natal:** The KZN Science Centre is known for its outreach programmes promoting science and technology education, particularly in rural areas.
4. **Eastern Cape:** Centres like the Nelson Mandela Bay Science & Technology Centre focus on engaging youth in science and technology.
5. **Free State:** The Naval Hill Planetarium and Boyden Observatory in Bloemfontein are vital attractions emphasising astronomy and space science.

6. **North-West:** The focus is on leveraging science centres to support mining and agriculture, key provinces’ key industries.
7. **Limpopo:** Efforts are underway to establish more science centres to serve the rural population and promote interest in science and technology.
8. **Mpumalanga:** Given the province’s rich biodiversity and conservation areas, the emphasis is on environmental education.
9. **Northern Cape:** The province is leveraging its unique geographic features, such as the Square Kilometre Array (SKA) project, to promote science and technology education.

11.3.5 Key Insights

The trends in science and technology centres globally and across Africa, focusing on South Africa and its provinces, highlight a shift towards interactive and immersive experiences, sustainability, and addressing local challenges. South Africa, in particular, is leveraging these centres as critical tools for education and public engagement in science and technology, with each province tailoring its approach to local needs and resources.

11.4 External Environment Analysis

Below is an analysis of the organisation’s strategy environment stratified in the following approach:

1	2	3
SWOT ANALYSIS	MARKET TRENDS	STAKEHOLDER ANALYSIS
Provides an analysis of the organisation’s strengths, weaknesses, opportunities, and threats.	Insights into industry trends, market conditions, and competitive landscape.	Identification and analysis of key stakeholders and their expectations.

11.4.1. Swot analysis

STRENGTHS

Established Reputation: Celebrating 20 years of existence, Sci-Bono is well-recognized and respected, especially as the second largest science centre in Africa.	Strategic Location: It is situated in the Newtown precinct, a heritage site with historical significance, which enhances its appeal and accessibility.	Strong Partnerships: Formulated as a PPP with the Gauteng Provincial Government, Department of Education, business sector, STREAM professionals, and civic society, providing a robust support network.	Educational Impact: Significant contributions to improved learner outcomes through the Secondary School Improvement Programme, keeping Gauteng in the top 3 for Matric Results for over 10 years.
Innovative Facilities: Features like the 4IR centre, multimedia broadcasting studio, and Classroom of the Future using VR and META technology.	Diverse Offerings: Provides various programs and services, including psychometric assessments, ICT academy, artisan skills development, and afterschool ICT support.	High Visitor Numbers: Attracts over 80,000 visitors annually and is recognised as a premier tourist destination.	Community Focus: Dedicated to addressing educational inequalities and providing public service benefits, especially for underprivileged communities.

WEAKNESSES

Funding Dependency: Reliance on the Gauteng Education Department for 90% of funding, making financial stability vulnerable to government budget changes.	Dwindling Alternative Funding: Decrease in gatekeeping revenue and donations from industry players over the years.	Aging Infrastructure: Located in a heritage site, the building may require significant maintenance and upgrades to meet modern standards.	Resource Constraints: Potential resources (financial, human, technological) limitations to expand and innovate.
Operational Challenges: The Secondary School Improvement Programme (SSIP) is labour-intensive and costly, impacting cash flow and diverting attention from core business activities.	Ethical and Integrity Risks: The contested stakeholder terrain and dependency on a single funder can compromise ethics and integrity, threatening sustainability.	Safety Concerns: The Newtown precinct's declining safety levels make it challenging to attract new visitors and retain businesses.	

FIGURE 2: SWOT ANALYSIS

OPPORTUNITIES

Expansion of Funding Sources: Diversifying funding through grants, international partnerships, and private sector investments.	Technological Advancements: Leveraging emerging technologies like AI, VR, and machine learning to enhance exhibits and educational programs.	Global Collaborations: Partner with international science centres and educational institutions to share knowledge and resources.	Increased Community Engagement: Expanding outreach programs to engage more underprivileged communities and schools.	Tourism Growth: Capitalizing on its status as a top tourist destination to increase visitor numbers and revenue.	Sustainability Initiatives: Implementing sustainable practices and programs to attract environmentally conscious visitors and partners.
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THREATS

Economic Instability: Economic downturns could impact government funding and donations from the private sector.	Political Changes: A government of national unity post-elections could lead to changes in funding priorities, potentially affecting the SSIP and overall financial stability.	Competition: Other educational and entertainment venues may attract potential visitors and funding.	Technological Obsolescence: Rapid technological changes may render current exhibits and facilities outdated.	Regulatory Changes: Changes in education and non-profit regulations could affect operations and funding.	Maintenance Costs: High costs associated with maintaining and upgrading a heritage site could strain financial resources.	Safety and Security: Declining safety in the Newtown precinct could deter visitors and partners, impacting revenue and engagement.
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FIGURE 2: SWOT ANALYSIS

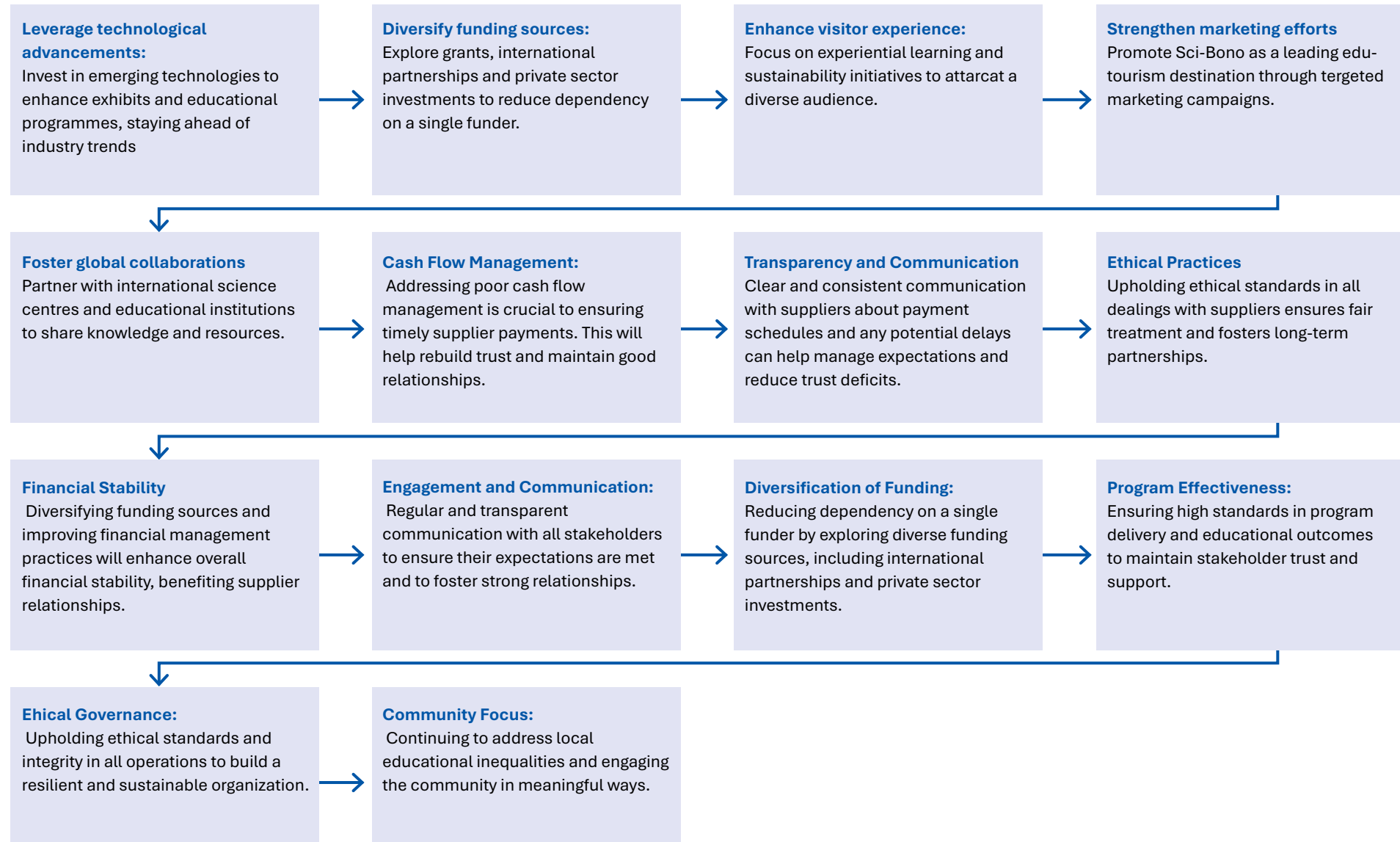


11.4.2. Market Trend Analysis

Increased Focus on STREAM Education	Trend: There is a growing emphasis on integrating science, technology, research, engineering, arts, and mathematics (STREAM) into educational curricula worldwide. Impact: This trend aligns with Sci-Bono's mission to advance equitable access to STREAM education, providing opportunities to expand programs and attract more visitors and partnerships.
Technological Advancements	Trend: Rapid technological advancements, including AI, VR, and machine learning, are transforming educational experiences. Impact: Sci-Bono's innovative facilities, such as the 4IR Centre and Classroom of the Future, and the Multi-Media Broadcasting Platform position it well to leverage these technologies to enhance exhibits and educational programs.
Sustainability and Environmental Education	Trend: There is an increasing focus on sustainability and environmental education, driven by global concerns about climate change. Impact: Sci-Bono can incorporate sustainability initiatives and programs, attracting environmentally conscious visitors and partners.
Experiential Learning	Trend: There is a shift towards experiential and hands-on learning experiences in education. Impact: Sci-Bono's interactive exhibits and hands-on programs align with this trend, enhancing visitor engagement and learning outcomes.

ECONOMIC UNCERTAINTY	TOURISM INDUSTRY FLUCTUATIONS	EDUCATIONAL POLICY CHANGES	COMPETITIVE LANDSCAPE	INTERNATIONAL SCIENCE CENTRES	TECHNOLOGICAL COMPETITORS
Condition: Economic instability can impact funding from government and private sector sources. Impact: Sci-Bono's reliance on the Gauteng Education Department for funding makes it vulnerable to budget changes. Diversifying funding sources is crucial for financial stability.	Condition: The tourism industry fluctuates due to global travel trends, economic conditions, and safety concerns. Impact: As a premier tourist destination, Sci-Bono needs to continuously innovate and market itself to attract visitors, especially in a competitive and fluctuating tourism market.	Condition: Changes in educational policies and priorities can affect funding and program implementation. Impact: A government of national unity post-elections could shift funding priorities, impacting programs like the Secondary School Improvement Programme (SSIP).	Local Competitors Competitors: Other educational and entertainment venues in Johannesburg and surrounding areas. Impact: Sci-Bono must differentiate through unique offerings, high-quality exhibits, and innovative programs to attract and retain visitors.	Competitors: Leading science centres globally that offer cutting-edge exhibits and programs. Impact: Sci-Bono can learn from and collaborate with international science centres to enhance its offerings and maintain a competitive edge.	Competitors: Online educational platforms and virtual learning experiences. Impact: Sci-Bono must integrate digital and virtual learning experiences to stay relevant and competitive in the digital age.

11.4.3. Strategic Implications



11.5. Monitoring and evaluation

- Regularly review the progress of each strategic initiative against set milestones.
- Collect feedback from visitors, educators, and community members to assess the impact of new programmes and partnerships.
- Adjust strategies based on external technological changes, education trends, and funding landscapes.

11.6. Sustainable business model canvas

This canvas provides a structured overview of how the Sci-Bono Discovery Centre operates. It highlights key factors such as partners, activities, resources, and value propositions that drive its mission and sustainability.

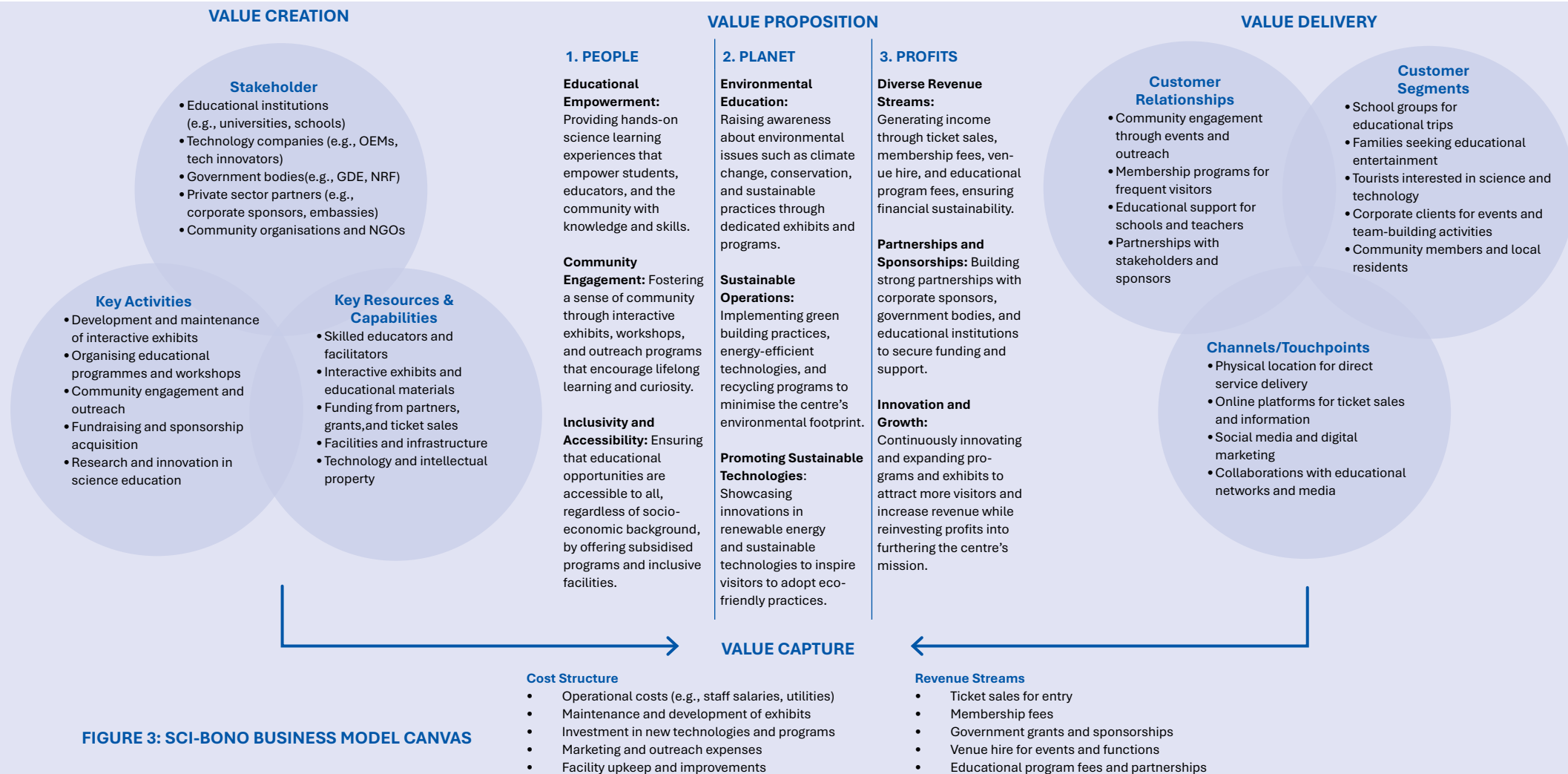


FIGURE 3: SCI-BONO BUSINESS MODEL CANVAS

Key Elements:

1. **Customer Segments:** The Centre serves various groups, including school groups, families, corporate clients, tourists, and communities, particularly underprivileged individuals and those with special education needs.
2. **Value Proposition:** Sci-Bono enhances teaching and learning in STREAM, offers over 300 interactive exhibits, provides career guidance, engages communities through educational programs, and hosts events. It also emphasises innovation and research to develop relevant educational products.
3. **Key Activities:** The Centre focuses on interactive exhibits, educational programs, community engagement, and maintaining a library and resource centre. It aims to optimise digital channels and improve public relations and marketing.
4. **Key Resources:** Resources include hands-on interactive exhibits, dedicated learning spaces, specialised STREAM programs, a career centre, and community engagement initiatives.
5. **Key Partners:** Partnerships include government agencies, private sector companies (e.g., BMW, Dell), scientific bodies, and educational institutions, which help leverage resources and expertise.
6. **Channels:** The Centre utilizes various channels for outreach, including social media, digital platforms, public events, and newsletters to engage stakeholders and promote its initiatives.
7. **Customer Relationships:** Sci-Bono fosters relationships with educational institutions, government bodies, corporate partners, and the public, focusing on customer-centric approaches and effective communication.
8. **Revenue Streams:** The Centre generates income through government funding, grants, admission fees, educational programs, corporate events, and merchandise sales.
9. **Cost Structure:** Major costs include staffing, facility maintenance, program development, and operational expenses, with a focus on cost optimization and strategic budgeting.

Overall, the Sci-Bono Discovery Centre aims to be a leading educational tourism destination in Southern Africa, promoting STREAM education and community engagement through innovative and interactive learning experiences.



PART C

MEASURING OUR PERFORMANCE

12. INSTITUTIONAL PERFORMANCE INFORMATION

The Sci-Bono Strategic Plan is based on the mandate as articulated in the MOI, and the situational analysis conducted informed the five-year strategic focus in Part B above. Further, Sci-Bono has also considered the stated ambitions of funders, partners and stakeholders.

13. IMPACT

In line with Sci-Bono’s mandate, as outlined earlier in this document, five impact areas have been formulated for implementation via Sci-Bono programmes and sub-programmes. Table 4 below summarises the Strategic Goals.

TABLE 4: SCI-BONO STRATEGIC GOALS

Strategic Goals	Strategic Goal 1: Advance equitable access to science, technology, research, engineering, arts and mathematics (STREAM) education.
	Strategic Goal 2: Position Sci-Bono as a leading Edu-tourism destination.
	Strategic Goal 3: Promote research, development and innovation (RDI) in pursuit of a scientifically competitive society.
	Strategic Goal 4: Achieve organisational sustainability.
	Strategic Goal 5: Build a resilient organisational culture of commitment to excellence, and agility.

Table 4 above summarises Sci-Bono’s strategic intent over the next five years. Strategic objectives have been further identified for each Strategic Goal, which breaks down how each Strategic Goal will be realised. Table 5 below shows the linkages between impact and outcome statements.

TABLE 5: SCI-BONO GOAL AND OBJECTIVE MAP

STRATEGIC GOALS	STRATEGIC OBJECTIVES
Strategic Goal 1: Advance equitable access to science, technology, research, engineering, arts and mathematics (STREAM) education	Strategic Objective 1.1: Develop a prototype to guide the professionalisation of ECD.
	Strategic Objective 1.2: Expanding the footprint of programmes beyond Gauteng by harnessing the use of ICT infrastructure.
	Strategic Objective 1.3: Establish a multi-certification skills development centre focused on school and on post-school education and training.
Strategic Goal 2: Position Sci-Bono as a leading Edu-tourism destination	Strategic Objective 2.1: Enhanced visitor experience through modernisation including the integration technology.
	Strategic Objective 2.2: Reposition Sci-Bono Science Centre as a preferred tourist destination.
Strategic Goal 3: Promote research, development and innovation in pursuit of a scientifically competitive society	Strategic Objective 3.1: Position Sci-Bono as thought leader in science research development and innovation.
	Strategic Objective 3.2: Establish and enhance partnerships and collaborations in the region, on the continent, and globally.
Strategic Goal 4: Achieve organisational sustainability	Strategic Objective 4.1: Increase funding through the diversification of funding sources and revenue streams by 30% by 2028-29.
	Strategic Objective 4.2: To position Sci-Bono as the leading lessor for corporate and public sector entities in Newtown by achieving a 70% increase in lease rate by the end of 2026.
	Strategic Objective 4.3: Develop a revised costing and funding model.
	Strategic Objective 4.4: Reclaim the whole value chain to drive savings of 15% by year 4.
	Strategic Objective 4.5: Improve working capital management to address liquidity challenges by maintaining a financial sustainability ratio of 15% reserve funds to annual operational costs.
	Strategic Objective 4.6: Enhance compliance with the SCM Policy Framework.
Strategic Goal 5: Build a resilient organisational culture of commitment to excellence, and agility	Strategic Objective 5.1: Improved corporate and cooperative governance process.
	Strategic Objective 5.2: Implement and capacitate an efficient organisational structure that supports Sci-Bono's strategy.
	Strategic Objective 5.3: Implement a culture and leadership alignment programme that is conducive to an innovative "world-class" science centre.
	Strategic Objective 5.4: Improved/enhanced institutionalisation of an approved PMO Model for Sci-Bono.

14. OUTCOMES/STRATEGIC OBJECTIVES

Each Strategic Goal has been translated into outcome statements and output indicators. Table 6 below illustrates the baseline and five-year target required for each strategic outcomes-oriented objective to support the realisation of the Strategic Goals above.

TABLE 6: MEASUREMENT FRAMEWORK

STRATEGIC OBJECTIVES	PERFORMANCE INDICATORS	BASELINE	FIVE YEAR TARGETS
Strategic Objective 1.1: Develop a prototype to guide the professionalisation of ECD	ECD prototype developed and accredited by the target date.	New Indicator	Q4 2025/2026
	Number of ECD practitioners developed.	600	1100
	% of ECD learners being supported	New Indicator	100 000 by 2030
Strategic Objective 1.2: Expanding the footprint of programmes beyond Gauteng by harnessing the use of ICT infrastructure	% pass rate for all grade 12 gateway subjects offered through SSIP.	95%	95%
	Number of schools implementing the SSIP programme.	440 Secondary Schools	+ 25% 550 Secondary Schools
	Number of learners accessing STREAM programmes through Sci-Bono.	200, 000	350 000
Strategic Objective 1.3: Establish a multi-certification skills development centre focused on post-school education and training research	Number of learners exiting with PSET certifications.	New Indicator	50 000
Strategic Objective 2.1: Position Sci-Bono as thought leader in STREAM related research development and innovation	Number of new exhibitions designed and marketed.	New Indicator	5 new interactive exhibits by 2027
	Increased number of visitors to Sci-Bono Science Centre.	80 000 per annum	20% increase by 2030
	Using data within Sci-Bono to generate and develop research focus areas.	New indicator 30 papers per annum	230 papers
Strategic Objective 2.2: Establish and enhance partnerships and collaborations in the region, on the continent, and globally	Number of partnerships with designated institutions established.	22 signed and implemented MOU per annum Active (Source 2021/22) Annual Report	10% increase per annum

STRATEGIC OBJECTIVES	PERFORMANCE INDICATORS	BASELINE	FIVE YEAR TARGETS
Strategic Objective 3.1: Enhanced visitor experience through modernisation including the integration technology	Number of science centre visitors from 60k to 150k by 2029.	60,000	150, 000
Strategic Objective 3.2: Reposition Sci-Bono Science Centre as a preferred tourist destination	Number of partnerships secured in the tourism industry.	15	150 by 2030
Strategic Objective 4.1: Increase funding through the diversification of funding sources and revenue streams by 40% by 2029-30	% of revenue generated from new funding sources.	4% of total funding (non-GDE funding)	50% by 2030
Strategic Objective 4.3: Develop a revised costing and funding model	Revised model for costing and funding by year 2024/2025.	New indicator	Q4 of FY2024/2025
	Reduce dependency on a single funder.	87%	to 50% by 2030.
Strategic Objective 4.4: Reclaim the whole value chain to drive savings of 15% by year 4	Percentage of savings realised by year 4 %of value chain integration in the core-business.	New indicator	15%
Strategic Objective 4.5: Improve working capital management to address liquidity challenges by maintaining a financial sustainability ratio of 15% reserve funds to annual operational costs sustainability ratio of 15% reserve funds to annual operational costs	Working Capital Ratio.	New indicator	15%
Strategic Objective 4.6: Enhance compliance with the SCM Policy Frameworks	Percentage compliance to SCM Policy Framework.	New Indicator	100%

STRATEGIC OBJECTIVES	PERFORMANCE INDICATORS	BASELINE	FIVE YEAR TARGETS
Strategic Objective 5.1: Improved corporate and corporative governance processes	Clean audit	Clean audit	Clean audit
	% compliance to the policy and legislative framework.	New Indicator	100%
Strategic Objective 5.2: Implement and capacitate an efficient organisational structure that supports Sci-Bono's strategy	Approved Organisational structure that is aligned to the strategy by 2024/25.	2020 approved organisational structure	Q4 of FY2025/2026
	% staff meeting the minimum requirement as per position requirement.	New Indicator	90%
Strategic Objective 5.3: Implement a culture and leadership alignment programme that is conducive to an innovative "world-class" science centre	% of the Sci-Bono Executive Team and Senior Managers participating in the Sci-Bono Leadership Development Programmes.	New Indicator	75%
Strategic Objective 5.4: Institutionalise an approved PMO Model for Sci-Bono	A revised and approved PMO model.	New Indicator	2025/26
	Percentage of projects implemented within scope, time and budget.	New indicator	90%
	No. of clients secured for support by PMO.	New indicator	5% by year 5

15. EXPLANATION OF PLANNED PERFORMANCE

In this section, the strategic intent of each of the five goals is unpacked. The goals have been analysed, and a strategic theme has been assigned at the core of each institutional goal, as per Table 7 below. The strategic themes are then further unpacked in the sections below.

STRATEGIC OBJECTIVES	PERFORMANCE INDICATORS
Strategic Goal 1: Advance equitable access to science, technology, research, engineering, arts and mathematics (STREAM) education	Access and Equity
Strategic Goal 2: Position Sci-Bono as a leading Edu-tourism destination	Edu-Tourism
Strategic Goal 3: Promote research, development and innovation in pursuit of a scientifically competitive society	Research, Development, and Innovation
Strategic Goal 4: Achieve organisational sustainability	Financial Sustainability
Strategic Goal 5: Build a resilient organisational culture of commitment to excellence, and agility	Organisational Resilience

15.1 Access and Equity

In pursuit of Strategic Goal 1, Sci-Bono focuses on leveraging cutting-edge infrastructure, innovative technology, and robust science education to foster a culture of accessibility and equity within the realm of STREAM at Sci-Bono. STREAM, an acronym encompassing Science, Technology, Research, Engineering, Arts, and Mathematics, represents the dynamic intersection where creativity meets scientific exploration.

By harnessing the power of infrastructure, Sci-Bono aims to create an environment where state-of-the-art facilities and resources are accessible to learners from all walks of life. Embracing technology becomes not just a choice but a strategic imperative, as it becomes a tool to bridge gaps and enhance learning experiences, ensuring that every student has an equal opportunity to thrive in science, technology, and the arts. Moreover, Sci-Bono's commitment to science education must extend beyond traditional boundaries, incorporating robotics, engineering, and the arts to create a holistic educational approach.

15.2 Edu-tourist destination

Edu-tourism refers to the blend of education and tourism where visitors engage in learning experiences focused on scientific concepts, discoveries, and innovations. This form of tourism emphasises hands-on, interactive experiences that foster curiosity and a deeper understanding of science. As part of this initiative, Sci-Bono will offer various educational programmes, workshops, exhibits, and demonstrations designed to educate visitors of all ages. Edu-tourism allows participants to explore subjects like biology, physics, environmental science, and technology through immersive activities. Such experiences not only enhance visitors' knowledge but also promote critical thinking and inspire future interest in scientific fields.

In efforts to rebuild and invigorate the economy of the Newtown Precinct through strategic partnerships, Sci-Bono aims to create a sustainable ecosystem that not only fosters educational tourism but also generates economic opportunities for the surrounding community. By positioning itself as a premier Edu-tourist destination, Sci-Bono envisions

contributing significantly to the renewal of the local economy while offering a transformative learning experience.

15.3 Research, Development, and Innovation

Research, Development, and Innovation (RDI) are interconnected processes essential for advancing knowledge, creating new products, and enhancing services.

1. **Research:** This is the systematic investigation aimed at discovering new information or increasing understanding of a subject. It can be basic (focused on gaining new knowledge without immediate commercial applications) or applied (aiming to solve specific practical problems).
2. **Development:** This phase involves translating research findings into practical applications. It encompasses the design, development, testing, and iteration of products or services that arise from research insights. Development focuses on refining concepts into viable modes of implementation.
3. **Innovation:** This refers to the process of transforming ideas or inventions into marketable products, services, or processes. Innovation emphasizes creativity and the implementation of improvements that lead to enhanced performance, efficiency, or value in the marketplace. It can also involve adopting new technologies or methodologies.

Together, RDI drives technological progress, economic growth, and improvement in living standards by fostering new ideas and converting them into tangible outcomes.

Rooted in collaboration, foresight, and a dedication to progress, this strategic theme aims to provide a roadmap that aligns with Sci-Bono's mission of fostering a scientific curiosity and advancement culture. To achieve the goal of creating a scientifically competitive society through research, development, and innovation, we will pursue the following key initiatives:

- Establishing a research and innovation hub
- Collaborating with research institutions
- Encouraging student research programmes
- Industry collaboration for applied research
- Open access to research findings
- Investing in cutting-edge technology
- International collaboration
- Promoting interdisciplinary research
- Continuous assessment and improvement

15.4 Financial Sustainability

This strategic theme aims to develop and acquire diverse resources that not only support the institution's operational needs but also enable it to expand its reach and influence. As Sci-Bono aims to thrive in the ever-evolving landscape of education, there is need to focus on diversifying revenue streams.

Sci-Bono must create a resilient financial foundation to weather uncertainties and support the organisation's growth by exploring innovative funding models, strategic partnerships, and philanthropic engagements. Furthermore, the development of Sci-Bono's resources extends beyond traditional funding sources. This will

entail identifying collaboration opportunities with industry leaders, government entities, and educational organisations. By fostering these partnerships, Sci-Bono can tap into a wealth of expertise, knowledge, and financial support, enhancing its capacity to deliver impactful educational programmes and experiences.

Technological advancements and digital transformations also feature prominently, focusing on leveraging online platforms, virtual resources, and e-learning initiatives. By embracing these tools, Sci-Bono will expand its educational reach and create additional revenue streams, ensuring financial sustainability in a rapidly changing academic landscape.

15.5 Organisational Resilience

At the heart of this strategic theme lies the cultivation of a strong organisational culture that fosters collaboration, innovation, and a shared commitment to Sci-Bono's mission. The identified initiatives will guide the development of strategies to strengthen the bonds among team members, creating a cohesive community that embraces diversity, values continuous learning, has solid and dynamic leadership, has a healthy financial position, and is united in pursuing educational excellence. Agility is a critical component of organisational resilience, and it demands adaptability and the ability to navigate change with nimbleness. The key initiatives will guide Sci-Bono in developing agile structures and processes, allowing the organisation to respond effectively to emerging trends, technological advancements, and unforeseen challenges.

16. KEY RISKS

Identifying and effectively managing potential risks is crucial in our endeavour to deliver on the identified outcomes. We have developed a detailed risk management plan encompassing ten significant risks and their assessment, mitigation, and contingency strategies.

OUTCOMES/STRATEGIC OBJECTIVE	RISK	ROOT CAUSE	RISK MITIGATION
Develop a prototype to guide the professionalisation of ECD	Failure to develop a guide for the professionalisation of ECD	- Inadequate understanding of the national accreditation framework - Not using a project approach to the development of ECD	- Comprehensive review of accreditation criteria - Adopting project management methodology
Expanding the footprint of programmes beyond Gauteng by harnessing the use of ICT infrastructure	Sci-Bono educational programmes remain a Gauteng-focused project with minimal growth in learners and schools participating	- Value proposition not clear - Inadequate mechanism	- Patent Programmes to ensure its value proposition - Update technology platforms to enhance ease of access
Establish a multi-certification skills development centre focused on post-school education and training research	Lack/non availability of a multi certification development centre	- Certifications not based on markets - Misalignment of certifications to market needs	Ongoing labour market analysis to inform PSET certifications
Enhanced visitor experience through modernisation including the integration technology	Decrease of visitors to the Sci-Bono Discovery Centre	- Partnership Dependencies - Inadequate Visitor Facilities - Ineffective Marketing Strategies - Tourism Market Fluctuations	- Continuous market research and product development - Maintain a network of potential partners. - Implement temporary solutions while permanent fixes are underway. - Engage marketing consultants for fresh perspectives
Reposition Sci-Bono Science Centre as a preferred tourist destination	No improvement in Sci-Bono market perception	- Inadequate partnerships and or engagement with a tour operator - Inadequate outreach strategies	- Develop and implement a marketing strategy - Develop and implement a stakeholder management and partner engagement

TABLE 8: KEY RISKS PER OUTCOME

OUTCOMES/STRATEGIC OBJECTIVE	RISK	ROOT CAUSE	RISK MITIGATION
Increase funding through the diversification of funding sources and revenue streams by 30% by 2029-30	Inability to generate/increase revenue funding	- Changes in Corporate Sponsorship Priorities - Ineffective Digital Fundraising Strategies - Economic Downturn	- Broaden the corporate network to mitigate dependency on a few sponsors - Continually monitor and adjust digital strategies and invest in digital marketing training. - Engage external digital marketing experts if needed - Diversify funding sources and establish reserve funds. - Implement cost-saving measures.
To position Sci-Bono as the leading lessor for corporate and public sector entities in Newtown by achieving a 70% increase in lease rate by the end of 2026	Inability to position Sci-Bono as the leading lessor for corporate and public sector entities	- Market Competition - Property Damage or Maintenance Issues	- Develop unique selling propositions and competitive pricing strategies. - Diversify leasing options to appeal to a broader market - Regular property inspections and maintenance schedules. - Allocate budget for emergency repairs.
Develop a revised costing and funding model	Funding and costing model not aligned with business needs	The funding and costing model are not updated with each new Sci-Bono strategy	Review and validate the costing and funding model for each strategic planning cycle
Reclaim the whole value chain to drive savings of 15% by year	Savings targets not realised	- Savings targets not on employee scorecard - Cost reduction opportunities not fully defined	- Develop a savings realisation and cost reduction strategy - Board and EXCO-level accountability - Clear savings targets cascaded through the organisation
Improve working capital management to address liquidity challenges by maintaining a financial sustainability ratio of 15% reserve funds to annual operational costs	Liquidity challenges persist	Sub-optimal implementation of financial and credit management policy	- Board-level oversight of financial management - Monitoring of financial metrics
Enhance compliance to the SCM Policy Framework	Non-compliance to SCM Prescripts	- Sub-optimal policy framework - Lack of understanding of SCM prescripts by end users - Lack of vendor performance management Inadequate contract management	- Gap assessment to the SCM policy - Conduct awareness of SCM processes - Conduct ongoing monitoring of reports received for projects entered - Ongoing monitoring and reporting

TABLE 8: KEY RISKS PER OUTCOME

OUTCOMES/STRATEGIC OBJECTIVE	RISK	ROOT CAUSE	RISK MITIGATION
Improved corporate and cooperative governance process	Poor risk and control management environment	- Lack of Board and EXCO oversight on risk register - Non implementation of audit action plans - Inadequate consequence management	- Implement and report risk management processes/activities - Test the control environment (on efficiency and effectiveness) - Executive and Board Oversight on the risk strategic register
Implement and capacitate an efficient organisational structure that supports Sci-Bono's strategy	Misalignment organisational structure (Capacity, Functions and operations)	Non-adherence to job requirements in recruitment processes	- Implement regular skills audits - Monitor
Implement a culture and leadership alignment programme that is conducive to an innovative "world-class" science centre	No changes in the level of alignment to Sci-Bono, the desired culture Unethical organisational Culture	- Values have not been taught in ways of work - Non-implementation of culture change programme	- Conduct culture assessment - Define the Sci-Bono To-Be culture programme - Ongoing measurement of culture alignment - Consequence management
Improved/enhanced institutionalisation of an approved PMO Model for Sci-Bono	Inadequate implementation of project management process	- Lack of project management planning - Projects implemented outside PMO - Lack of project management training	- Induct project managers and staff in the Sci-Bono project management approach - Utilise project M&E approach to enhance accountability
Position Sci-Bono as thought leader in science research development and innovation	Delayed process to enhance research on innovation ecosystem, science and Technology economic growth and social cohesion	- Talent Acquisition Challenges. - Technology Integration Difficulties. - Technology Obsolescence	- Utilise consultants and temporary staff. - Engage recruitment agencies and offer competitive packages. - Early testing, ongoing IT support - Regularly update technology and equipment and stay abreast of technological advancements. - Establish partnerships with tech companies for early access to new technologies.
Establish and enhance partnerships and collaborations in the region, on the continent, and globally	Inability to establish, enhance partnership and foster collaboration in the region, on the continent, and globally	Misalignment in the choice of partners	Develop a stakeholder and partner management approach

TABLE 8: KEY RISKS PER OUTCOME

PART D

TECHNICAL INDICATOR DESCRIPTIONS

The following technical indicator descriptions have been formulated for the identified outcomes for the five-year Sci-Bono Strategic Plan.

FIGURE 9: TECHNICAL INDICATOR DESCRIPTION

OUTCOME INDICATOR	
Indicator Title	PI01: ECD prototype developed and accredited by the target date
Definition	The indicator measures Sci-Bono's ability to develop and obtain accreditation for an Early Child Development centre to drive professionalisation.
Source of data	ECD M&E Programme Records
Method of Calculation / Assessment	An approved ECD prototype and model that meets the regulatory requirements and has been accredited (simple count)
Assumptions	ECD will dedicate resources and institute a project to ensure an ECD prototype is developed and accredited in the next two years.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Source of data	ECD M&E Programme Records
Method of Calculation / Assessment	An approved ECD prototype and model that meets the regulatory requirements and has been accredited (simple count)
Assumptions	ECD will dedicate resources and institute a project to ensure an ECD prototype is developed and accredited in the next two years.
Disaggregation of beneficiaries [where applicable]	Not Applicable

OUTCOME INDICATOR	
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Annual progress against the fiveyear target
Desired performance	All targeted schools in underserved populations will implement the programme
Indicator Responsibility	ECD Programme Manager

Indicator Title	PI02: Number of ECD practitioners developed
Definition	The indicator measures the number of ECD practitioners who were developed and accredited as practitioners as part of the approved ECD model rollout.
Source of data	Sci-Bono M&E System
Method of Calculation / Assessment	Using signedoff ECD Programme records, document the number of accredited practitioners. (simple count)
Assumptions	Measures the extent to which targeted preschools implement STREAMfocused programmes
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	600 per annum
Indicator Responsibility	ECD Programme Manager

Indicator Title	PI03: % of ECD learners being supported
Definition	The indicator measures the percentage of learners supported within ECD programmes. Learner support includes assessment, development, and education.
Source of data	Sci-Bono M&E System
Method of Calculation / Assessment	Numerator: Total number of learners supported Denominator: Total number of enrolled learners in ECD centres x 100
Assumptions	Measures the extent to which targeted preschools implement STREAM focused programmes
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly

OUTCOME INDICATOR	
Desired performance	TBC 80%
Indicator Responsibility	ECD Programme Manager
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	TBC 80%
Indicator Responsibility	ECD Programme Manager

Indicator Title	PI04: % pass rate for all grade 12 gateway subjects offered through SSIP
Definition	The percentage of targeted beneficiaries enrolled in the Secondary School Improvement Programme (SSIP) that pass grade 12 gateway subjects.
Source of data	SSIP Programme Reports
Method of Calculation / Assessment	Number of individuals enrolled in SSIP as % of those that graduate after having passed grade 12 gateway subjects
Assumptions	Sci-Bono has a predefined target population and regularly documents SSIP programme records.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	Achieve 95% of the performance target.
Indicator Responsibility	SSIP Programme Manager

Indicator Title	PI05: Number of schools implementing the SSIP programme
Definition	This indicator measures the number of South African schools implementing the Secondary School Improvement Programme
Source of data	SSIP Programme Reports
Method of Calculation / Assessment	Total number of schools formally participating and implementing the SSIP programme (simple count)
Assumptions	Sci-Bono has mechanisms to register and track schools that are adopting SSIP

OUTCOME INDICATOR	
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	More than 150 thousand
Indicator Responsibility	SSIP Manager

Indicator Title	PI06: Number of students enrolled in SSIP
Definition	This indicator measures the number of learners participating Sci-Bono STREAM education programmes such as SSIP, LSEN, Outdoor Exhibit Centre, PSET and ECD.
Source of data	Programme Reports
Method of Calculation / Assessment	Simple count
Assumptions	Sci-Bono documents attendance to these programmes
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	Achieve 5% growth year on year
Indicator Responsibility	Programme Manager

Indicator Title	PI07: Number of learners exiting with PSET certifications
Definition	This indicator measures the number of learners who exit the school system with accredited certifications, making them more viable in the labour market.
Source of data	PSET Programmes Records
Method of Calculation / Assessment	Measuring the number of learners at exit point that leave with an accredited certificate (simple count)
Assumptions	Sci-Bono has mechanisms to register and track learners in the PSET programme.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly

OUTCOME INDICATOR	
Desired performance	80%
Indicator Responsibility	PSET Manager
Indicator Title	PI08: Development of Sci-Bono Research Impact Score (RIS)
Definition	This indicator measures the ranking of Sci-Bono's research output using a number of citations to its published works.
Source of data	Research Directorate
Method of Calculation / Assessment	Ranking on the GII Report for South African Science Innovation Agencies
Assumptions	Sci-Bono will make the necessary arrangements to track citations
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Annual progress against the fiveyear target
Desired performance	Top 10 in South Africa
Indicator Responsibility	Research Directorate

Indicator Title	PI09: Number of partnerships with designated institutions established
Definition	This indicator measures the partnerships between Sci-Bono and other organisations that can supplement and complement the capacity to generate research outputs in the designated areas of interest to Sci-Bono as a science centre.
Source of data	Research Directorate
Method of Calculation / Assessment	(simple count)
Assumptions	Sci-Bono has identified criteria for partnering and that the criteria are applied before a formal agreement is signed.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Annually
Desired performance	As per organisational stakeholder and partner management policy
Indicator Responsibility	Research Directorate
Assumptions	Sci-Bono has a way of measuring visitors per day and month.

OUTCOME INDICATOR	
Indicator Title	PI10: Rand Value generation through research
Definition	This indicator measures the rand value generated through Sci-Bono's research outputs and innovation products and services. Examples of revenue-generating services include reports produced, prototypes of exhibits, travelling exhibits, capacitybuilding workshops, etc.
Source of data	Audited Financial Reports
Method of Calculation / Assessment	Extracted from Sage Reports (simple count)
Assumptions	Sci-Bono has identified a suite of services earmarked for revenue generation and has a marketing strategy to encourage sales.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	The desired performance targets for the rand value to be generated will be determined based on the initial performance analysis and projected growth of research outputs and services. The aim is to achieve progressive quarterly growth in revenue generation through effective service commercialization and marketing strategies
Indicator Responsibility	Research Directorate

Indicator Title	PI11: Number of science centre visitors from 60 thousand to 150 thousand by 2029
Definition	This indicator measures the growth rate in the number of tourists visiting the Sci-Bono Discovery Centre due to the Sci-Bono Edutourism initiatives.
Source of data	Sci-Bono Registers
Method of Calculation / Assessment	Number of visitors (simple count)
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	80k Y1, Y3 100k, Y5 150k
Indicator Responsibility	Facilities Management

OUTCOME INDICATOR	
Indicator Title	PI12: Number of partnerships secured in the tourism industry
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	A least 30%
Indicator Responsibility	Chief Financial Officer

Indicator Title	PI14: Occupancy rate of Sci-Bono Facilities %
Definition	This indicator measures the extent to which Sci-Bono facilities are utilised.
Source of data	Lease Register
Method of Calculation / Assessment	Numerator: Number of units occupied Denominator: Total number of available units
Assumptions	Sci-Bono has facilities to lease out and documents occupancy rates.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Annually
Desired performance	At least 80% occupancy
Indicator Responsibility	Facilities Management

Indicator Title	PI15: Revised model for costing and funding by year 2024/2025
Definition	This indicator measures Sci-Bono's ability to develop a revised funding and costing model.
Source of data	CFO
Method of Calculation / Assessment	Approved revised costing and funding model.
Assumptions	The revised costing model will be aligned with the Sci-Bono strategy and business model.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Progress Report Quarterly

OUTCOME INDICATOR	
Desired performance	Approved by 2024/2025
Indicator Responsibility	CFO

Indicator Title	PI16: % of savings realised by year 4
Definition	This indicator measures Sci-Bono operating costs, the ongoing expenses incurred from a business's normal day-to-day operations. The idea is to gradually lower the proportion of operating expenses to organisational revenue.
Source of data	Office of the CFO
Method of Calculation / Assessment	Numerator: Operating costs Denominator: Total revenue
Assumptions	Factors that are accepted as true and sure to happen without proof
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	Operating costs should be less than (Funds added into Sustainability acc) $\neq$ 10% of Total funding
Indicator Responsibility	Chief Financial Officer

Indicator Title	PI17: Working Capital Ratio
Definition	Working capital, also called net working capital, represents the difference between a company's current assets and current liabilities. Working capital measures, a company's liquidity and short-term financial health. Sci-Bono has adopted this indicator to address liquidity challenges.
Source of data	Sci-Bono Management Reports
Method of Calculation / Assessment	Working capital = current assets – current liabilities.
Assumptions	In compliance with finance management policy and good governance standards, Sci-Bono keeps track of financial metrics.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	15% reserve funds for annual operational costs
Indicator Responsibility	CFO

OUTCOME INDICATOR	
Indicator Title	PI18: % compliance to SCM Policy Framework
Definition	This indicator measures the extent to which Sci-Bono complies with the institutionally approved policy framework on supply chain management.
Source of data	Internal Audit Report
Method of Calculation / Assessment	The score attained on the SCM compliance checklist.
Assumptions	Sci-Bono's SCM policy framework is reviewed annually or as prescribed by the Board and is compliant with the legislative and constitutional framework.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Annually
Desired performance	100% compliance
Indicator Responsibility	SCM Head, Internal Audit

Indicator Title	PI19: Clean audit
Definition	This indicator measures the extent to which Sci-Bono adheres to the principles of good governance by striving to attain clean.
Source of data	Audit Findings
Method of Calculation / Assessment	AG Audit Report
Assumptions	Sci-Bono is audited annually, the outcome of which is an Audit Report on audit findings.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Annual progress against the fiveyear target
Desired performance	Identifies whether actual performance that is higher or lower than the targeted performance is desirable
Indicator Responsibility	Who is responsible for managing or reporting on the indicator

OUTCOME INDICATOR	
Indicator Title	PI20: % compliance with to policy and legislative framework
Definition	This indicator measures Sci-Bono's compliance with the Board approved policy and legislative compliance framework. Examples include the Sci-Bono Finance Management Policy, International Financial Reporting Standards (IFRS), King IV Report for NGOs. Sci-Bono will need to update and formally adopt the organisational good governance framework against which good governance and risk management will be measured.
Source of data	Audit Reports
Method of Calculation / Assessment	The score attained on the GRC compliance checklist.
Assumptions	Sci-Bono will develop the mechanisms, including an instrument that will be administered to assess compliance.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	100% compliance
Indicator Responsibility	Internal Audit

Indicator Title	PI21: % staff meeting the minimum requirement as per position requirement
Definition	This indicator measures the extent to which Sci-Bono staff have the qualifications necessary to perform as per the job specifications of their positions.
Source of data	Skills Audit Reports
Method of Calculation / Assessment	Denominator: Number of positions with office bearers that meet requirements as defined in job specifications Numerator: Total number of jobs on the approved organogram,
Assumptions	There is an approved staff establishment, each with an approved job specification.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Annually
Desired performance	90%
Indicator Responsibility	Corporate Services Director

OUTCOME INDICATOR	
Indicator Title	PI22: % of the Sci-Bono Executive Team and Senior Managers participating in the Sci-Bono Leadership Development Programmes
Definition	This indicator measures the percentage of executive team members and senior managers within Sci-Bono who enrol in a customised leadership development programme. It is meant to ensure that Sci-Bono has a robust leadership repository that aligns with its mandate.
Source of data	Human Resources Development Unit
Method of Calculation / Assessment	Denominator: Number of EXCO and Senior Management team members enrolled Numerator: Total number of EXCO and Senior Management team members
Assumptions	Sci-Bono will develop and launch a customised leadership development programme that is aligned with Sci-Bono's vision, mission, and values as a science centre.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	75%
Indicator Responsibility	Corporate Services Director

Indicator Title	PI23: % of projects implemented within scope, time and budget
Definition	This indicator measures the percentage of Sci-Bono projects implemented within scope, time and scope. It is meant to ensure that a project management culture drives organisational performance and mandates realisation.
Source of data	PMO Programme Records
Method of Calculation / Assessment	Denominator: Total number of projects that achieved 90% of targets Numerator: Total number of projects registered and executed within the reporting period
Assumptions	Sci-Bono PMO is mandated to implement all strategic projects; at least 80% of the projects are registered with the PMO.
Disaggregation of beneficiaries [where applicable]	Not Applicable
Spatial transformation [where applicable]	Not Applicable
Reporting Cycle	Quarterly
Desired performance	80%
Indicator Responsibility	Senior Manager Special Projects

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This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.



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