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OVERVIEW

IITPSA is the only **South African Qualifications Authority (SAQA) recognised** and **IFIP IP3 accredited** professional body for ICT
Practitioners in South Africa.

VISION, MISSION AND STRATEGIC OBJECTIVES

VISION

"To be the best at building and sustaining a professional ICT Community"

MISSION

"Leading ICT professionalism and ethical digital transformation"

STRATEGIC OBJECTIVES

- Increase Career Development opportunities for our members
- Demonstrate Thought Leadership
- Develop and improve Stakeholder Relationships and engagement

STAKEHOLDER RELATIONSHIPS

As a SAQA-recognised and IFIP IP3 accredited professional body for ICT practitioners, IITPSA is both involved and active in the wider ICT community in South Africa and understands the value of appropriate professional relationships with other organisations, including those in the public, private and non-profit sectors of the economy where numerous formal and informal relationships exist.

In the 'other professional body' arena, IITPSA has relationships with ISACA South Africa Chapter, ISC2 Gauteng Chapter, SAIEE and the BRM Institute.

IITPSA is a member of the SA Independent Professional Bodies Forum, the International Federation for Information Processing (IFIP), the IFIP International Professional Practice Partnership (IFIP IP3), the African ICT Alliance (AfICTA) and the Federation of Enterprise Architecture Professional Organisations (FEAPO).

The Institute has **Board level representation** on the CIO Council of South Africa, AfiCTA and IFIP IP3. IITPSA is also represented on the international **Skills Framework for the Information Age (SFIA) Council**. IITPSA currently has signed memoranda of understanding with BPESA, Datasec, Coder/LevelUP and GIBS.

KEY ACTIVITIES

The IITPSA is engaged in numerous **member-focused activities**, including:

- Career and Skills Development
- Continuing Professional Development
- Skills Assessment
- · Thought Leadership
- Women in IT
- Bursary awards
- Scholarships
- Professional Designations
- Digital Badging and Credentials
- Olympiads and Competitions
- Annual IITPSA President's Awards, recognising excellence in the profession and industry
- · Chapter and Special Interest Group (SIG) events
- IFIP and IP3 membership and organisation
- Africa ICT Alliance (AfICTA) membership and Board participation
- SFIA Council representation and the ongoing development of the skills framework.

South African Qualifications Authority (SAQA) recognised and IFIP IP3 accredited

professional body for ICT Practitioners in South Africa.







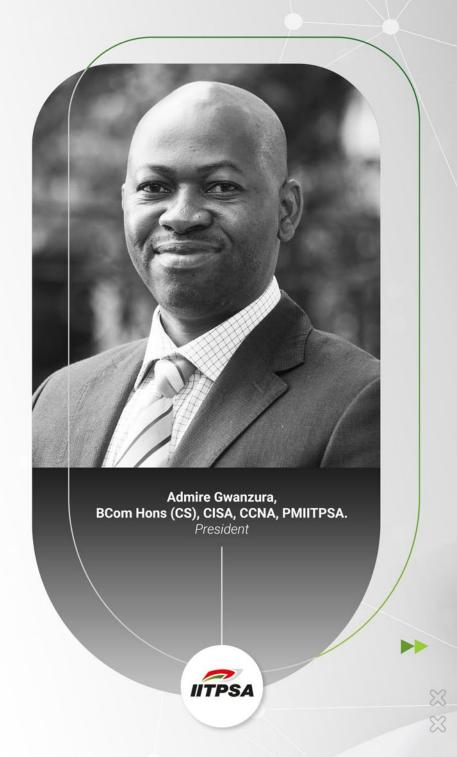
As we continue to grow and adapt in the year ahead, we encourage all our stakeholders to keep engaging with us online and in person.

Another highlight for us was the 2021 President's Awards, which had a particularly high calibre of candidates. It was exciting to see the number of highly regarded top CIOs and IT professionals nominated and participating in the event; which we see as an indication that industry leaders in South Africa still hold us in high regard and want to be associated with the Institute.

As we continue to grow and adapt in the year ahead, we encourage all our stakeholders to keep engaging with us online and in person; sharing your thoughts on other activities and projects we could launch to add even more value for our members and the IT community as a whole.

Admire Gwanzura

President: IITPSA





IITPSA NPC

Unit 4 Probuild Commercial Park 347 James Crescent

Halfway House

Midrand, 1685



During the 2021-22 financial year, the COVID-19 pandemic again had a significant impact on the Institute, our members, and the South African economy as a whole. Restrictions on movement, both locally and internationally, strict limitations on face-to-face engagements, and many economic challenges, have been the order of the day throughout this period.

The IITPSA continued to function in a hybrid mode, with the staff spending two days each week at the office, and three days per week working from home. Our successful adoption of virtual events, including the prestigious annual IITPSA President's Awards, has shown that the IITPSA remains an adaptable professional body able to evolve and respond to change.

We're proud of the way the Institute - and the IT profession as a whole - have been able to adapt over the decades, especially during the pandemic. The past two years have been a particularly challenging time for everyone in the industry, and we believe our members have responded extremely positively. They have helped to minimise the impact of the pandemic and lockdown, by deploying the solutions that helped people to remain connected, kept both public and private services running, allowed businesses to keep operating and helped to keep millions of citizens either safely at home, or working in a hybrid mode, while they continued with their daily lives. We have helped transform the way people live and work, and paved the way for the arrival of a new normal.

Exactly how this new normal will evolve in years to come remains to be seen. But what we do expect to see in the short term is more remote and hybrid work, driven by acceptance of this model, growing demand for flexibility for employees, and factors like the rising cost of fuel.



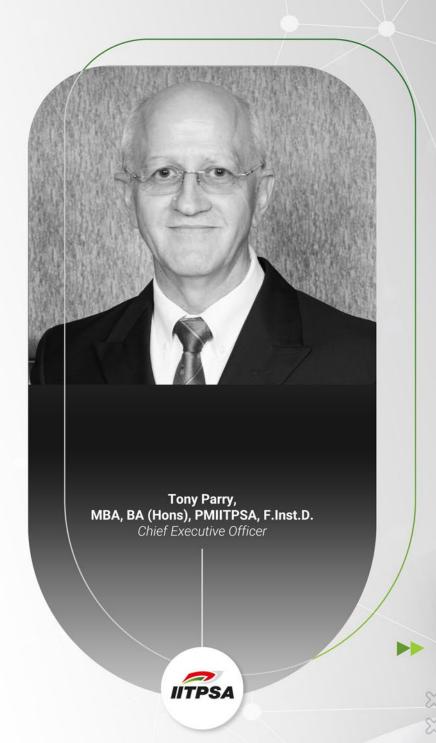




But what we do expect to see in the short term is more remote and hybrid work, driven by acceptance of this model, growing demand for flexibility for employees.

We also expect to see the Gig economy becoming more mainstream, changing employment models and creating new opportunities for skilled workers. This is particularly relevant in the IT sector, where skilled professionals are in short supply, and many of them are migrating offshore.

On the home front, during the past year, IITPSA hosted approximately forty virtual events across many different areas of interest, collaborated and interacted with numerous other professional bodies and organisations, and launched our third professional designation – that of certified member (CMIITPSA). This designation joins the other two existing ones, namely Professional Member (PMIITPSA®) and Professional CIO (Pr.CIO®). We encourage all qualifying members to apply for one of these professional designations, indicating your commitment to professional, ethical behaviour and your own career and profession through continuing professional development.



We look forward to continued engagement with all of our members and stakeholders and thank you for your continued professionalism during these challenging times.

Tony Parry

Chief Executive Officer







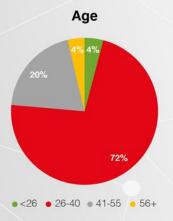
MEMBERSHIP

Like many organisations, both locally and internationally, IITPSA has felt the **impact of the global pandemic over the last two years**. After a long period of steady growth, our overall membership numbers declined at the end of the 2021 and 2022; financial years, and, as of the 28th February 2022, the total number of **members** was 7 679. It should be noted that the vast majority of the decrease came from the group of members not in good standing with the Institute (i.e. fees not yet paid). We are committed to growing our membership base again as matters begin to 'normalise'.

IITPSA introduced the new **Member Self Service (MSS)** portal in late August 2021, enabling members to update their details, pay their membership fees, access their membership certificates and record CPD activities. This has also enabled the Institute to **reduce its carbon footprint** through the provision of QR coded, digital membership certificates (reduction in printing (ink and ink cartridges) and paper consumption), and the termination of the issuing of annual membership cards (no plastic card consumption and no customisation printing).

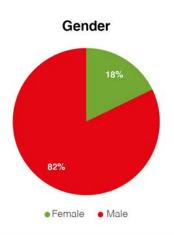






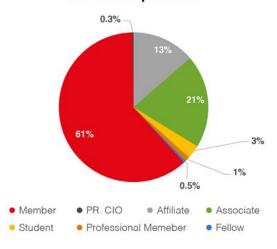
Similar to the prior year, 72% of members are in the highly active 26 - 40 age group, in the prime years of their professional development. 4% are starting out, or in the early stages of their ICT careers, and 20% are seen to be senior practitioners.





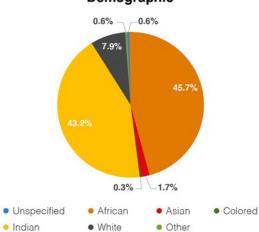
18% of our members are female, which is a small improvement from the previous year.

Membership Grades



The membership grade analysis has remained relatively unchanged over the last two years.

Demographic

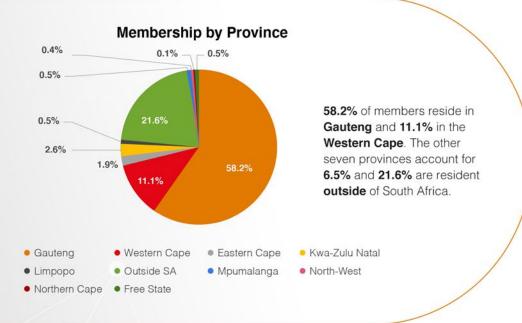


Indian

The demographic break-down of the total membership of the Institute is reflected in the graph on the left. The relatively high number of Indian members is indicative of those coming to South Africa from the Indian subcontinent.













5 STRUCTURE AND GOVERNANCE

5.1 BOARD OF DIRECTORS

5.1.1 BOARD MEETINGS ATTENDANCE RECORD

			IITPSA Board Meetings 01 Mar 2021 to 28 Feb 2022	
Name	Туре	Position	Quarterly Board Meetings	Special Board Meetings (5)
Admire Gwanzura	NED	President / Board Chairperson	4/4	5/5
Senele Goba	NED	Vice-President / Chair Remuneration	3/4	1/5
Thabo Mashegoane	NED	Immediate Past President / Chair Nominations	4/4	4/5
Karel Matthee	NED	Treasurer / Chair Audit & Risk	4/4	3/5
Pearl Pasi	NED		4/4	2/5
Rimmon Kisten	NED		3/4	0/5
Kudzayi Chipidza	NED		2/4	2/5
John Singh	NED		4/4	4/5
Tony Parry	ED	Chief Executive Officer	4/4	5/5
Prof. Lynn Futcher (Appointed 24 August 2021)	NED		2/3	4/4
Josine Overdevest (Appointed 24 Aug 2021)	NED	Chair Social & Ethics	3/3	1/4
Ulandi Exner (Stepped down 24 Aug 2021)	NED		0/1	1/1
Moira de Roche (Stepped down 24 Aug 2021)	NED		1/1	1/1
Llewellyn Kearns (Resigned 22 Oct 2021)	NED		0/2	0/1



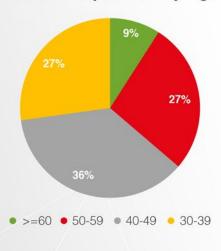
The members of the IITPSA Board participated in four scheduled, quarterly meetings, and five special meetings. The Table above indicates the **participation by each of the Board members.**



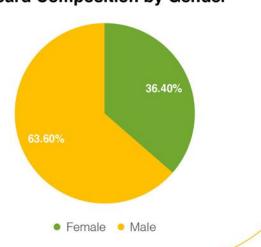


5.1.1 BOARD COMPOSITION AS AT 28 FEB 2022:

Board Composition by Age



Board Composition by Gender



5.2 BOARD COMMITTEES

5.2.1 AUDIT AND RISK COMMITTEE

Audit and Risk Committee Chairperson:

Mr Karel Matthee (Chairperson)

Committee Members:

Mr Rimmon Kisten Mr John Singh Mr Llewelyn Kearns (Resigned 22/10/2021) The IITPSA ("the Institute") audit and risk committee is a board committee. The committee functions within documented terms of reference and **complies with relevant legislation**, regulation and governance codes. This report of the audit and risk committee is presented to members in compliance with the requirements of the Companies Act and the revised King Code of Governance Principles ("King IV").

ROLE OF THE COMMITTEE

The audit and risk committee ("the committee") has an independent role with accountability to both the board and to members. The committee's responsibilities include the **statutory duties** prescribed by the **Companies Act**, activities recommended by **King IV** as well as additional responsibilities assigned by the board.



The responsibilities of the committee are as follows:

Annual reporting

- · Review the annual financial statements;
- Review and approve the appropriateness of accounting policies, disclosure policies and the effectiveness of internal financial controls;
- Perform an oversight role on the Institute's annual reporting and consider factors and risks that could impact on the integrity of the annual report;
- Review sustainability disclosure in the annual report and ensure it does not conflict with financial information;
- Consider external assurance of material sustainability issues;
- Recommend the annual report for approval by the board.

Combined assurance

- Ensure the combined assurance model addresses all significant risks facing the Institute; and
- Monitor the relationship between external and internal assurance providers and the Institute.

Finance function

- Consider the expertise and experience of the finance manager; and
- Consider the expertise, experience and resources of the Institute's finance function.

Risk management

- Make recommendations to the board on levels of risk tolerance and risk appetite;
- Ensure risk management is integrated into business operations;
- Ensure risk management assessments are conducted on a continuous basis;
- Ensure frameworks and methodologies are implemented to increase the possibility of anticipating unpredictable risks;
- Ensure that management considers and implements appropriate risk responses;
- Express the committee's opinion in the effectiveness of the system and process of risk management; and
- Ensure risk management reporting in the annual report is comprehensive and relevant.

External audit

- Review the quality and effectiveness of the external audit process; and
- Ensure a process is in place for the committee to be informed of any reportable irregularities identified by the external auditor.





COMPOSITION OF THE COMMITTEE

The committee comprised four independent non-executive directors during the period. These directors include suitably skilled directors having recent and relevant financial and risk management experience. The committee is elected by the board after the annual general meeting.

The following directors served on the committee during the period under review:

Independent non-executive director	Qualifications	Term	ARC Quarterly Meetings attended	ARC Special Meetings attended
Mr Karel Matthee (Chairperson)	B Sc (Hons), B Com	01/03/2021 - 28/02/2022	4/4	1/1
Mr Rimmon Kisten	BSc (IT), MBA, A+, N+, MCSE, MCSD, CNE, CNA, MCP	01/03/2021 - 28/02/2022	4/4	0/1
Mr John Singh	BSc (CS), Dip. PM	01/03/2021 - 28/02/2021	4/4	1/1
Mr Llewelyn Kearns	BCom (Informatics), N6 Electronic Eng.	01/03/2021 - 22/10/2021	1/2	N/A

The chief executive officer, head of operations and finance manager attend meetings at the invitation of the committee.

CONTROLS AND AUDIT

INTERNAL CONTROL

Systems of internal control are designed to manage, rather than eliminate, the risk of failure to achieve business objectives and to provide reasonable, but not absolute, assurance against misstatement or loss.

While the board is responsible for the internal control systems and for reviewing their effectiveness, responsibility for their actual implementation and maintenance rests with executive management. The systems of internal control are based on established organisational structures, together with written policies and procedures, and provide for suitably qualified employees, segregation of duties, clearly defined lines of authority and accountability. They also include cost and budgeting controls, and comprehensive management reporting.

INTERNAL FINANCIAL CONTROLS

The committee has assessed information and explanations given by management on the results of the 2021/22 audit. Through this process no material matter has come to the attention of the audit and risk committee or the board that has caused the directors to believe that the company's system of internal controls and risk management is not effective and that the internal financial controls do not form a sound basis for the preparation of reliable financial statements.



EXTERNAL AUDIT

The external auditor has **unrestricted access** to the Institute's records and management. The auditor furnishes a written report on significant findings arising from the annual audit.

The audit partner in charge of the audit is rotated off the audit after five years. In terms of this policy, the current audit partner is in the **fifth year of tenure and will be changed for the 2023 audit**. The Institute has received confirmation from the external auditor that the partners and staff responsible for the audit comply with all legal and professional requirements with regard to rotation and independence. The committee is satisfied that the external auditor is independent of the company.

ACTIVITIES OF THE COMMITTEE

The committee met five times during the financial year and attendance at the meetings is detailed in the previous section. Members of the committee and the external auditor may request a **non-scheduled meeting** if they consider this necessary. The chairperson of the committee will determine if such a meeting should be convened.

Minutes of the meetings of the committee, except those recording private meetings with the external auditors, are circulated to all directors and supplemented by an update from the committee chairperson at each board meeting. Matters requiring action or improvement are identified and appropriate recommendations made to the board.

The **chairperson** of the committee attends the Annual General Meeting to answer any **questions** on the committee's activities.

The committee performed the following activities relating to the audit function during the year under review, with certain of these duties being required in terms of the Companies Act:

- reviewed the Institute's internal financial control and financial risk management systems; and
- reviewed and recommended to the board for approval the annual report and annual financial statements.

EVALUATION OF FINANCE MANAGER AND FINANCE FUNCTION

The committee is **satisfied** that the expertise and experience of the finance manager is appropriate to meet the **responsibilities** of the position. This is based on the **qualifications**, levels of **experience**, continuing professional **education** and the board's **assessment** of the financial knowledge of the finance manager.



The committee is also satisfied as to the **appropriateness**, **expertise** and **adequacy** of resources of the finance function and the experience of senior members of management responsible for the finance function.

APPROVAL OF THE AUDIT AND RISK COMMITTEE REPORT

The committee confirms that it has functioned in accordance with its terms of reference for the 2021/2022 financial year and that its report to members has been approved by the board.

By Chairperson of the Audit and Risk Committee:

Karel Matthee 20 May 2022



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5.2.2 FINANCE COMMITTEE



The Finance Committee assists the Board by providing oversight of the financial affairs of the Institute, including the budget, forecast, monthly and annual financial statements.

ACTIVITIES OF THE FINANCE COMMITTEE

The Committee met monthly and reviewed the financial performance (Actual vs Budget) of the Institute for each month under review and considered the Income Statement, Balance Sheet, Cash Flow statement and Forecast, given the prevailing climate of the economy and the context of the Institute.

The Committee Chairperson produced a monthly Finance Report which summarised the highlights and discussion points of the committee meetings. These were shared with members of the Board and the members of the Members Council when they had their scheduled meetings.

5.2.3 MEMBERSHIP AND CRITICAL SKILLS ASSESSORS



Following the changes necessitated by the COVID-19 lockdown and the MyMembership protocols, the Membership Committee has modified its processes into an online operation of assessors and moderators remunerated on a per item basis. MyMembership enables the Head of Operations to monitor the progress of all applications through each stage, to oversee the workload and turnaround of each assessor/moderator and to reconcile the remuneration thereof. The implementation of the new Critical Skills List by the Department of Home Affairs in February 2022 led to a steep increase in applications for Critical Skills Renewals in the last month of the financial year, and we are evaluating the resources that may be required if this increase is sustained.





The Remuneration Committee's purpose is to advise the IITPSA Board on all matters relating to remuneration, to enable the Institute to develop and sustain ethical. consistent, fair and impartial strategies, policies, procedures and processes for the compensation of its staff, so as to attract, motivate and retain talented people.

The Remuneration Committee met twice during the year to consider annual staff increases, salary awards for new employees and annual bonus payments for staff members.

5.2.5 SOCIAL AND ETHICS COMMITTEE



According to the Social & Ethics Committee Terms of Reference the committee consists of at least three (non-executive) directors and an additional two IITPSA members may be appointed by the Board. The committee chairperson should be a non-executive director

During the first six months of the year the chairperson of the Social & Ethics Committee was Ms Moira de Roche. After many years of worthwhile contribution Ms de Roche's term as non-executive director came to an end and she handed over the baton to committee member Josine Overdevest who was elected as non-executive board member during the August 2021 IITPSA AGM and chairperson of the Social & Ethics Committee during the August 2021 Board meeting. In March 2022 the call went out to the IITPSA membership to join our committee as voluntary member and we hope to welcome our new member in May 2022.

The Social and Ethics Committee forms an important part of the governance structure of IITPSA. We are not mandated by law to have the committee, but as ITPSA recognises its importance in the communities and environment where it operates and pursues its business goal, combined with the increased global focus on the integration of Environment, Society and Governance (ESG) considerations into organisational strategies, we feel that this committee serves a vital monitoring and strategic role. We are guided by the Board approved Terms of Reference. IITPSA's Code of Ethics is used as the foundation of ethical decision making.

The function and work of the Social & Ethics Committee include:

- Monitoring activities
- Monitoring social & economic development activities
- Oversight responsibility

Monitoring activities

- a) Good corporate citizenship where we review amongst other things:
- Promotion of equality
- Prevention of unfair discrimination
- Reducing corruption in society
- iv. Our contribution to development of the communities in which are activities are conducted







- Recording sponsorship, donations and charitable giving
- c) The environment, health and public safety
- d) Member and other stakeholder relationships, including the organisation's advertising, public relations and compliance with consumer protection laws.
- e) Labour and employment, such as our standing of the International Labour Organisation Protocol on decent work and working conditions, as well as employee relationships and development of the employees.

Monitoring social & economic development activities

IITPSA's standing in terms of the goals and purposes of:

- The 10 principles set out in the United Nations Global Compact
- The Organization of Economic Cooperation and Development (OECD) recommendations regarding corruption
- iii. The Employment Equity Act
- The Broad-Based Black Economic Empowerment Act and its associated ICT Sector Code

Oversight - tying into the monitoring activities we maintain oversight of

- a) Corporate citizenship activities
- b) Environment, health and public safety
- c) Stakeholder relationships
- d) Labour and employment
- e) Ethics governance
- f) Procurement processes
- g) Membership matters:
- The committee will review members complaints and compliments and provide guidance on what is working well and what needs to change.
- ii. Applicant grievances prospective members who are not accepted follow a process where they can question why they are not accepted as members. If the process has been exhausted, the applicant can escalate the matter to the SEC as a last resort – the SEC will review decisions taken throughout the process.

Committee work in progress

Meetings

We hold four online meetings annually. IITPSA senior management attends by invitation. Any conflicts are adjudicated by the IITPSA Board.

Code of Ethics

During the first six months of the year-under-review we worked at preparing the adoption of the 2020 IFIP Code of Ethics ensuring that the principles from the IITPSA's Code of Conduct were incorporated. This led to the IITPSA Code of Ethics and Code of Good Practice to be proposed to and approved by the August 2021 AGM.

Implementation of the IITPSA Code of Ethics

Our current work is the implementation of the IITPSA Code of Ethics and Code of Good Practice amongst the IITPSA members with a focus on professional pride, integrity and reputation. In a number of webinars and workshops we'll explore how ethics play an increasingly important role in the IT profession and explain how members can use an ethical decision-making model in their daily IT practice.

5.2.6 MEMBERS COUNCIL AND CHAPTER COMMITTEES

Members Council Chairperson:

Mr. Tony Parry (CEO)

Western Cape Chapter Chairperson:

Ms. Pearl Pasi

Gauteng Chapter Chairperson:

Mr. Johan Steyn

Eastern Cape Chapter Chairperson:

Prof. Lynn Futcher

KZN Chapter Chairperson:

Mr. Marshall Masanga

Women in IT Chapter Chairperson:

Ms. Baratang Miya

Chapter Chairs are elected to their Chapter Committees by the membership body in their region and are elected to the Chairperson's role by all the members of the Chapter Committee.

The Members Council is the forum in which Chapter Chairs can communicate with one another, share best practices, and discuss matters of mutual interest.

The IITPSA CEO chairs the Council and reports through to the Board on the affairs of the Members Council and Chapter Committees. The Members Council meets quarterly, two to three weeks in advance of each Board meeting.



6 ACTIVITIES

6.1 IITPSA EVENTS HIGHLIGHTS 2021/2022

2021: THE YEAR WE MASTERED VIRTUAL

Where the events of 2020 caught everyone off guard, the **IITPSA** adapted quickly to the new normal. We're proud to say that by the time 2021 rolled around, we were **applying our learnings** to make the most of the virtual environment. Throughout the year, we hosted and participated in dozens of **virtual events**, bringing in reputable thought leaders from far and wide to address our members, and **expanding our audience** far beyond South Africa's borders.

Not bad for a veteran of 65 years' standing!

Milestones and key events in the year 2021-22

The IITPSA, previously known as Computer Society South Africa, was established in 1957, making **2022** our **65th anniversary**.

We have just launched the **Certified Member (CMITPSA) designation at SFIA level 3**. Most 'full' Members and some Associate Members will likely qualify for this.

'Full' Members may also qualify for the Professional Member (PMITPSA®) designation (SFIA level 5) which is also a SAQA registered and IFIP IP3 accredited professional designation.

We noted that IITPSA no longer issues printed membership certificates or personalised membership cards in an effort to reduce our plastic waste and carbon footprint and simultaneously provide a digital and improved solution to our members and stakeholders. We now produce a digital membership certificate, with an expiry date and a QR code which provides a more sustainable and efficient method of verifying current membership with us. Members can login to the member self-service platform and download their QR coded membership certificate, using the email address on record with IITPSA.



IT industry veterans in a class of their own dominated the 2021 IITPSA President's Awards held virtually in April 2022.

Professor Tshilidzi Marwala, Vice-Chancellor of the University of Johannesburg and winner of over 45 accolades, was named IT Personality of the year; while Herman Swanepoel, CIO and Innovation Officer at Bestmed Medical Scheme, won the Visionary CIO of the Year Award. Serial entrepreneur and founder of Ukheshe Technologies, Clayton Hayward, received the Technology Excellence Award, and the Tomorrow Trust won the Social Responsibility/Community Award. Ulandi Exner, past President of the IITPSA, received an IITPSA Fellowship award; and Prof. Jean Greyling, Associate Professor in the Department of Computing Sciences at the Nelson Mandela University and IITPSA Eastern Cape IT Personality of the Year 2019, won the Distinguished Service in ICT Award.

Brainstorm magazine has published **in-depth interviews** with the **winners** of the 2021 IITPSA Presidents Awards, including (left and below):

2021 IT Personality of the Year

Professor Tshilidzi Marwala, Vice-Chancellor of the University of Johannesburg





2021 Visionary CIO of the Year Herman Swanepoel is the Chief Information and Innovation Officer at Bestmed Medical Scheme



2021 Technology Excellence Award Clayton Hayward, co-founder of pan-African fintech Ukheshe Technologies.



Ulandi Exner, past President of the IITPSA, former chair-person of the IITPSA's Women in IT (WIIT)

Committee, and owner of Lands Consulting.



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2021 Distinguished Service in ICT Award: Prof. Jean Greyling Jean Greyling, Associate Professor in the Department of







FEBRUARY 2022

Senele Goba, IITPSA
Vice-President and Board
Vice-Chairperson, handed over the
2021 Computer Applications
Olympiad trophy to the gold medal
winner, Jaedon Naidu,
at his school in KZN.



IT has become so all-pervasive that a lack of ethics in this sector risks doing more harm than good, and widening the digital divide, said **Josine Overdevest**, founder and MD of educator training and coaching organisation Flying Cows of Jozi, non-executive director of the IITPSA and chair of the IITPSA Social and Ethics Committee. Josine featured in one of a new series of thought leadership videos by ;the IITPSA.



The South African IT industry needs to move quickly to support education and save the IT skills pipeline, or risk falling behind the world in terms of 4IR progress, said **Senele Goba**, Director of 4IR Innovations, founder of Ososayensi Education Advancement NPO and non-executive director of the IITPSA, in one of the IITPSA's thought leadership videos.



Automation, robotics and artificial intelligence can be a force for exceptional business progress, but could also cut jobs, impacting a multitude of workers and their families. Instead of cutting heads, organisations should be empowering employees with technology to become more valuable.

This is according to **Johan Steyn**, technologist, management consultant, Chair of the IITPSA Gauteng Chapter and Chair of the IITPSA Special Interest Group in AI and Robotics, speaking during a video in IITPSA's thought leadership series.

Non-fungible tokens – or NFTs – could help South African creatives better control the rights to their intellectual property, give them access to a broader market and improve their earnings. This is according to John Singh, non-executive director of the IITPSA and chair of the IITPSA Blockchain Special Interest Group in KZN, who was speaking during IITPSA's thought leaders' video series. John Singh also hosted a webinar on this topic in February 2022.



The IITPSA Western Cape Chapter has named its committee members for the financial year 2022 during their AGM in February. They are:

Pearl Pasi, Admire Gwanzura, Howard Makan,
Llewellyn Kearns, George Chinowaita,
Wisdom Pamire, Terence Govender, Joseph
Omidusul, Brendan Jackson, Amakan Agoni and Zanele Fikizolo. Seen here are some of the members at the AGM



The IITPSA Eastern Cape Chapter Committee for 2022/23 was named at the chapter's AGM in February. The members are:

- Prof Lynn Futcher (Chair)
- Prof Kerry-Lynn Thomson (Vice-Chair)
- Mr Devereaux Joubert
- Mr Kudakwashe Nyamutsambira
- Mr Harry Paleochoritis
- Dr Sue Petratos
- Prof Andre Calitz
- Mrs Belinda Samuels
- Mr Luzuko Tekeni
- Meggan Naude
- Elana Blom

IITPSA President Admire

Gwanzura presented the gold medal and Standard Bank

Trophy for the 2021 national Programming Olympiad to Minkyum Kim, a learner at Reddam House Durbanville.







>> JANUARY 2022

The IITPSA entered 2022 on an energetic note, with our work on the **President's Awards** well underway, and plans to step up our activities to deliver even more value to our members. Among the new events announced for the year are a CIO Series of webinars to bring top-level practitioners together for knowledge sharing and networking.

The **CIO Series** of quarterly webinars is aimed at CIOs and our growing corps of Pr.CIOs® - a designation awarded only to CIOs meeting the required levels of academic achievement and professional experience.

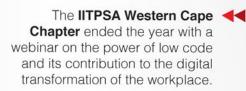


The year's events kicked off with a combined SIGAIR & SIGIST event on Quality Software in the AI era. The need for high-quality software has become greater than ever before. In an age where technology is merging with humans, the role of quality engineers is more critical than in previous decades. At this IITPSA webinar, we discussed the role of quality engineering in supporting Artificial Intelligence deployments. Our guest was Rik Marselis from the Netherlands: a leading thinker and author in the field of quality software in the smart technology era, and the panel included Johan Steyn, IITPSA Chair: Special Interest Group – AI & Robotics and Rob Kerrich-Walker, IITPSA Chair: Special Interest Group in Software Testing in South Africa.



DECEMBER 2021

The 9th AfICTA Summit was held on 8-9 December, 2021, with the theme "Accelerated Digitalization for Economic Revolution in Africa: Prospects and Challenges". Among the speakers was Thabo Mashegoane, Chair of AfICTA and Immediate Past President of the IITPSA.





NOVEMBER 2021











An IITPSA IFIP60 event was staged focusing on driving community networks to connect the unconnected in the developing regions for inclusive growth.

PROUD TO BE A MEDIA PARTNER OF:



Including Anchor Events

Africa | Africa Com

Tech

Uniting Business & Technology to Create a Better, More Inclusive Digital World

Free to Join Online Event 8 - 12 November 2021

tmt.knect365.com/africa-tech-festival

The IITPSA partnered with the Africa Tech Festival, which returned in November as an online experience, covering the biggest issues facing the future of African tech - including Connecting Africa's Next Billion, Digital Infrastructure Investment, industry applications with the Tech in Action agenda, the all-new Telcos of Tomorrow and much more.



One more IITPSA member achieved the **prestigious Professional** CIO (Pr.CIO®) professional designation for CIOs, and three were awarded the Professional Member (PMIITPSA®) designation.

Kevin Govender, a Partner/Director at Deloitte and the Deloitte Africa ERP Leader and CIO Programme Leader, achieved the Pr.CIO® designation, which is awarded only to CIOs meeting the required levels of academic achievement and professional experience, and is endorsed by the CIO Council of South Africa.

Goshalia Hiten, Jaco van der Merwe and Professor Lynn Futcher were awarded the Professional Member (PMIITPSA®) designation. PMIITPSA® is a SAQA Registered and IFIP IP3 accredited professional designation recognising academic qualifications and extensive experience in the ICT arena.

OCTOBER 2021

The IITPSA AI & Robotics Special Interest Group hosted a virtual event discussing AI: Opening Pandora's Box on ethics. Hosted by Johan Steyn, SIGAIR chair, the discussion featured Renée Cummings, a criminal psychologist and AI ethicist, and Dr Jacques Ludik, Founder & CEO, Cortex Logic & Cortex Group; Founder & President: Machine Intelligence Institute of Africa (MIIA) and author of Democratizing AI to Benefit Everyone.



EngineerIT Editor, Hans van de Groenendaal, had a panel discussion with JCSE - IITPSA ICT Skills Survey authors Adrian Schofield and Professor Barry Dwolatzky, and IITPSA CEO Tony Parry.









Minkyum Kim was announced as the winner of the gold medal and Standard Bank Trophy in the 2021 National Computer Programming Olympiad. 19 finalists from around the country participated in the finals of the Programming Olympiad in Cape Town. The Olympiad is a project of the IITPSA.



➤ Quality Assuring Quality Engineering: an IITPSA SiGIST Event, was staged on 21 October, asking: who is ensuring that there is actually quality in our quality engineering practises? The event featured Frankie Seegers, Quality Assurance advocate and Co-owner and Solutions Director for QoT Solutions.

The IITPSA KZN Chapter hosted an event entitled Building Personal Resilience on 7 October. This virtual training session with Bianca Rohan explored techniques to increase personal resilience and re-ignite motivation levels.





In September, we released the findings of the 2021 JCSE – IITPSA IT Skills Survey; one of our larger annual projects. The study, co-authored by production consultant at the IITPSA, Adrian Schofield, and Director of the JCSE Professor, Barry Dwolatzky, found that although a shift to the gig economy has not yet occurred in South Africa's ICT sector, it is plausible that various forces in the industry might change this in the future. It said the Covid-19 move to work from home had raised the question of whether linking an employee to a single employer still makes sense, or whether the traditional "job" should instead be broken down into a sequence of tasks or "gigs" that can be carried out by anyone.

The **IITPSA Blockchain SIG in KZN** hosted a webinar entitled: Is Ethereum 2 the future of Blockchain?

Ethereum 2 is a major planned upgrade to the Ethereum Blockchain that is currently in progress. In this presentation John Singh discussed the technical aspects of the upgrade to Ethereum 2, including beacon chains, sharding and proof of stake.



An IITPSA Enterprise Architecture SIG
Event on 30 September asked: Enterprise
Architects: Is it time to look for another job?
Debating the question were these four
industry experts (right and below):



Marius Snel, Chief Executive Officer, Knotion Consulting



Peter Robb, Group Chief Enterprise Architect, Multichoice



Juan Strauss, Executive, Enterprise Architecture & Design, Nedbank Limited 28





James Thomas, Lead Enterprise Architect, Business Solutions and Technology Department, SARB



IITPSA and EngineerIT co-hosted a
Tabling Tech Webinar on 21 September,
on Teaching Coding in South African
Schools. The event outlined the use of
TANKS and BOATS Coding Apps to
introduce coding to learners who do
not have access to PCs.

The event featured (left and below):

Prof Andre Calitz, Distinguished Professor of Computing Sciences, Nelson Mandela University



Prof Jean Greyling, Acting HOD – Department of Computing Sciences Nelson Mandela University

In September, 2021, we invited nominations for the 2021 IITPSA President's Awards and announced that the theme of the awards would be 'Excellence in the New Normal'. IITPSA President Admire Gwanzura said: "The 2020 awards were themed Excellence in Adversity, recognising IT excellence during the challenging early days of the pandemic. This year, we accept that times have changed, and IT professionals now play a pivotal role in helping business and society adapt to a digital 'new normal'."



Moira de Roche, a long-serving non-Executive Director and former President of the IITPSA was named Vice President of the global International Federation for Information Processing (IFIP), of which IITPSA is a member. IFIP is the leading multinational, apolitical organisation in ICTs and Sciences, representing IT bodies from over 56 countries and regions and recognised by the United Nations and other world bodies.

AUGUST 2021

New IITPSA office bearers were elected following the IITPSA National AGM: new President and Board Chairperson Admire Gwanzura, who was previously Vice-President, and new Vice-President and Vice-Chair Senele Goba. Treasurer Karel Matthee was re-elected.







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Two new Non-Executive Members were elected to the #IITPSA Board at the national AGM: Professor Lynn Futcher and Josine Overdevest.





During August, IITPSA's new Member Self-Service (MSS) platform went live, allowing our members to update and manage their own membership information.

Marking IFIP's 60th anniversary, a series of events was run during the last quarter of the year, featuring members and associates of IFIP and showcasing the interesting and impressive work they do.



The IITPSA Women in IT (WIIT) chapter celebrated its relaunch and the launch of its new website with a special Women's Day webinar on personal and professional coping strategies. The special Women's Month event featured TEDx speaker, coach, trainer and author from Beyond the Dress, Lori Milner. The event allowed participants to compare notes on how women IT professionals are juggling the work-from-home environment, looking at how they can better own their time, master their headspace and make remote working work for them so that they can show up powerfully to themselves in life and business.



The WIIT chapter, with additional committee members and a new website, aims to encourage and empower young women who are seeking a career within the IT sector, as well as to uplift women who are already established in IT careers.





Some of South Africa's most visionary CIOs joined the IITPSA for an in-depth look at the role of the CIO, and how to instil innovation and vision to benefit the organisation. They included winners of the IITPSA President's Awards Visionary CIO title **Dr Stanley Mpofu**, CIO of the University of the Witwatersrand, and **Nomthi Nelwamondo**, CIO of Assupol - who were jointly recognised as 2020's Visionary CIO of the Year, and **Sandra La Bella** – Visionary CIO Award winner 2019, and Senior Executive Information Technology at The Unlimited.



An IITPSA SIGIST Event on 19 August addressed the topic: Being a Human Tester in the Digital World. Featuring Dr. Barış Sarıalioğlu, the managing partner of TesterYou, this session was designed to assist software testers to carry out paradigm shifts in their mindset about Software Testing and the Software Tester's role.



A webinar entitled: Artificial Intelligence to Benefit Everyone: How do we shape a better future? saw Johan Steyn, Chair: IITPSA SIG AI & Robotics, discussing this important topic with academic, entrepreneur and thought-leader Dr. Jacques Ludik.







On 3 August, the IITPSA announced the relaunch of its Special Interest Group in Cybersecurity (SIGCyber), with a highly topical panel discussion on national cyber security efforts including the NCPF and CSIRT. The discussion was moderated by Dr Jabu Mtsweni: Head of Information and Cyber Security Centre at the CSIR, with panellists Dr Brett van Niekerk: Senior lecturer in computer science at the University of KwaZulu-Natal and Dr. Kiru Pillay, Chief Director: Cybersecurity Operations in the South African DTPS.



The **Gauteng Chapter**, IITPSA's largest chapter, elected **four new members** to its committee for 2021 during its AGM in August They are Stephan Strydom, Saba Rahimi, Johan Steyn and Jeremiah Taguta. Dickson Willie, chapter chair for the past two years, stepped down. Speaking at the event, Johan Steyn, new Chapter chair and chair of the Special Interest Group on Al and Robotics (SIGAIR), said South Africa could face a dystopian technological future unless moves are made to harness technology for societal good now.

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Despite challenges in running this year's Computer Applications Olympiad for schools, learners turned out in their numbers to participate in a specially extended programme. The following medal winners were announced (left and below):



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Bronze Medal winners were:

Julian Milner: in Gr 12 at DF Malan High School, Western Cape

Ruan Schoeman: in in Gr 9 at Midrand Homeschool, Gauteng

Dian van der Berg: in Gr 12 at Hoërskool Rustenburg, North West

(1)





During August, the IITPSA passed a resolution to change the Code of Conduct to the IITPSA Code of Ethics, and its Code of Practice to the IITPSA Code of Good Practice. This change is in line with the IITPSA Social and Ethics Committee's work to align the IITPSA Code with the new IFIP Code of Ethics which was approved last year.



The IITPSA announced that the **Joburg Centre for Software Engineering (JCSE)** at Wits University is now an **IITPSA CPD Accredited** service provider.

We also announced that IITPSA members will accrue 1 CPD point for every Tabling Tech webinar they attend.



▶ JULY 2021

South Africa's team for the International Olympiad in Informatics (#IOI2021) held their own in the global event hosted by Singapore. Participants competed virtually from their own countries, with team SA hosted by UCT. South Africa's team of four was selected from among the top participants in the South African Computing Olympiads, a key project of the IITPSA.

Andi Qu, participating for his third time, again obtained a bronze medal as he did last year. Brent Butkow finished ranked 342, Jean Weight finished in 287th position and Faran Steenkamp was ranked 280. In addition to the serious IOI contest days, host country Singapore arranged several fun events where Faran Steenkamp was placed third in the sponsored Code Cup, and won a cash prize of 200 USD.

An IITPSA Special Interest Group - AI & Robotics (SIGAIR) webinar on 29 July was entitled 'Carbon and Silicon: The future of humanity in the smart technology era' and featured Seattle-based Futurist Richard Yonck, best-selling author of books like Future Minds: The Rise of Intelligence from the Big Bang to the End of the Universe and Heart of the Machine: Our Future in a World of Artificial Emotional Intelligence.



The IITPSA SIGiST hosted an event on Performance Engineering entitled Shift Left and Right on 22 July. The event featured Dirk Loosen, director and consultant at IT Ecology, who outlined how applying a "Shift Left and Right Performance Engineering approach" ensures performance bottlenecks are identified early and performance tests reflect real usage to continuously deliver exceptional user experience.



An IITPSA Eastern Cape Chapter
Event on 1 July focused on
Improving Traceability in Food
Value Chains through Blockchain
Technology. This event featured a
talk by Jaco Maas, the General
Manager of Shift DX, a
next-generation digital agricultural
platform business.







▶ JUNE 2021

An IITPSA KZN Chapter Blockchain SIG Event on 29 June covered Game theory and its application in Bitcoin, with John Singh discussing the basic ideas behind game theory and, through a series of simple examples, introducing the audience to some of the major concepts.



An IITPSA SIGIST Event on 24 June focused on Getting Automation right, the first time. This talk by Yamini Gajapathy, an IT consultant who leads the digital and data business for Wipro in Africa, focused on pitfalls and tips around types of automation, and the right approaches to automation.



Funding an ICT Start-Up: An IITPSA Entrepreneur Special Interest Group Event, was held on 23 June. We discussed venture capital as a way to access funding to grow business with Clive Butkow, CEO of Kalon Venture Partners.

On June 11, we announced that the **2021 South African ICT Skills Survey had gone live**, with the Virtual Assessor survey platform generously sponsored by Eduflex. The annual survey sought to understand the current ICT skills situation, and the impact the pandemic has had on skills.







IITPSA was a proud supporter of the ISACA South Africa Chapter annual virtual conference on 7-8 June.



The IITPSA endorsed the 16th
Annual ITWeb Security Summit,
which was held as an online event in
June 2021. During the event, the
track on GRC, Data Protection and
Privacy was chaired by Moira de
Roche, IITPSA Board member and
Chair, IFIP IP3.



MAY 2021

An IITPSA Western Cape Chapter Event on 27 May explored careers in data science, with a talk by **Louis Young, a data developer at iOCO**, on developing a career in data science, a brief history of data science and the importance of its application today.

An IITPSA KZN Chapter Event on 26 May addressed Artificial Intelligence in the context of Africa, with Tiger Chapanduka, veteran software developer with over 10 years of experience, who has a special interest in the implementation of software agents and holds a Masters of Science in Information Technology from the University of Liverpool. He offered both gory and rosy insights into Al and what it means for Africa.



On May 20, the IITPSA's Special Interest
Group – AI & Robotics, hosted a special
discussion on Conversational AI in the
context of Africa with two business leaders
who work on the cutting edge of this
technology on the African continent:
Harmony Mothibe - Founder & Director at
BotsZA who was named among the M&G
Top 200 Young South Africans in 2020, and
Antoine Paillusseau - CEO and Co-Founder
of Finchatbot, a technology solution that
enables financial clients to connect with and
add immediate value to its customers.



On 12 May, we announced the South African team for the prestigious International Olympiad in Informatics (IOI 2021), where informatics students from around the world would compete against each other in June this year. The team of four was selected after a lengthy process in which the top participants in the IITPSA Computer Programming Olympiad 2020 were trained and prepared for the IOI over several months. They were: Andi Qu (18), Brent Butkow (18), Faran Steenkamp (18), and Jean Weight (19).







https://www.youtube.com/results?search_query=iitpsa

At a special IITPSA event, Johan Steyn, IITPSA Chair: Special Interest Group – AI & Robotics, discussed the practical steps to smart automation with Zanele May and Atenkosi Ngubevana - two local market leaders who have been in the trenches of corporate automation initiatives.

On 5 May, an IITPSA KZN chapter event addressed **Location Intelligence**, covering how to **identify** possible use **cases** and related business **value** that location intelligence can help **realise**; and how to commence a location intelligence **journey** and get a view of the **products landscape** around location intelligence.

During May 2021, the IITPSA Board announced that it has recently developed the following purpose statement for the IITPSA: **Leading ICT professionalism and ethical digital transformation**, to encapsulate our broader mission statement in a fast-changing environment. Professionalism and ethics have been part of our mission statement since our inception over 60 years ago, but the focus on digital transformation is new.

The IITPSA also announced that it had awarded two bursaries to promising young students studying to enter the field of IT. The students were selected by the Women in IT committee, in line with IITPSA's focus on encouraging more young women to study IT-related subjects.

A full bursary, valued at R130,000, was awarded to Zuleigha Patel of Cape Town, to study at UCT. A smaller bursary, valued at R40,000, was awarded for a second year in a row to Veda October of Paarl, who is studying at the Pearson Institute.









▶► APRIL 2021

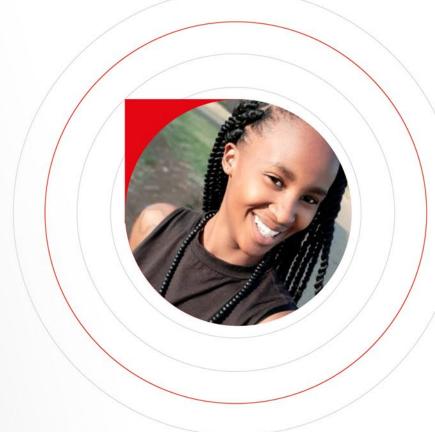
The **2020 IITPSA President's Awards** were held online this month for the first time ever. The event featured snacks and wine, live music, an engaging MC, and it suitably honoured the finalists and winners – without anyone having to leave their homes to attend.

The IITPSA capped an unusual year and its first ever virtual President's Awards ceremony by naming joint winners of the Visionary CIO of the Year Award for 2020. **Dr Stanley Mpofu**, CIO of the University of the Witwatersrand, and **Nomthi Nelwamondo**, CIO of Assupol, were jointly recognised as **2020's Visionary CIO of the Year** for their professionalism and excellence, particularly during the challenges of 2020. **Ntuthuko Shezi**, serial entrepreneur and innovator, and founder of livestock investment platform Livestock Wealth, was named **IT Personality of the Year for 2020**. **Girl Code**, an NPO empowering young girls and women through technology, was named **winner of the Social Responsibility/Community Award**, and **André Jacobs**, Chief of Product Engineering at IoT.nxt, was **winner of the Technology Excellence Award**. **Prof. Andre Calitz**, Distinguished Professor: Computer Science at Nelson Mandela University, received a **Distinguished Service in ICT Award**.

6.2. OLYMPIADS

In November 2020, the **three Computer Olympiads** (Talent Search, Computer Applications Oympiad and Computer Programming Olympiad) were **incorporated** into the operations of the IITPSA. In order to manage this new part of the business, the Board agreed that a dedicated IITPSA Education Officer should be appointed.

The **Education officer vacancy** was advertised and, after a lengthy process, **Mr. Kamohelo Motloung** was **appointed**, starting June 1st 2021. We welcome Kamohelo to the IITPSA Team.



INTRODUCTION

As noted above IITPSA runs three school-based contests namely, the Talent Search, the Applications Olympiad and the Programming Olympiad. IITPSA is also the national organisation that participates in the International Olympiad in Informatics (IOI). This was previously managed by the SA Computer Olympiads Trust (SACOT).

TALENT SEARCH

The Talent Search Aims

Talent Search aims to identify learners with an aptitude for IT, encourage them to consider a career in IT or to take suitable subjects for a career in IT and to develop problem-solving.

Target and Participating groups

Talent Search was offered at five levels by grade group:

Grade 5 and below Elementary

Grade 6 and 7 Junior

Grade 8 and 9 Intermediate

Grade 10 and 11 Senior

Grade 12 and above Elite

In an unprecedented 2021 year of covid-19, the number of learners that were entered for the Talent Search picked up again to 30 655 and there were 240 schools that entered.

APPLICATIONS OLYMPIAD

The Applications Olympiad aims to identify, encourage and reward computer application skills, to promote and encourage the study of the school subject Computer Applications Technology (CAT) and to create an awareness of study and employment opportunities in the field of Information and Communications Technology.

Target and Participating groups

Since 2010 the subject "Computer Applications Technology" (CAT) has been offered up to grade 12 at both state and independent schools. Typically, ten times more learners take CAT than those who take the subject Information Technology (programming). Many schools, including primary schools, offer some form of digital literacy in addition to the prescribed curriculum.





The number of **learner entries was lower by 9785 (down by 45%) than any previous year**. This was on account of **Covid recovery**, some schools were focusing on academic time lost.

Final Round: The 2021 Applications Olympiad invited 12 Finalists to take part in the finals.

The Awards Function was hosted remotely from the IITPSA office. Guest speaker was IITPSA CEO Tony Parry. Among the guests were:

Finalists, Parents, Teachers, Computer Olympiad Trustees, Scientific Committee members and Officials from various provinces. Ms Senele Goba (Vice chair of the IITPSA board) handed over the prestigious IITPSA trophy and the gold medal to the Applications Olympiad winner, Jaedon Naidu.

Sponsorship/Funding

The Institute of Information Technology Professionals South Africa is the main sponsor of the Applications Olympiad.

PROGRAMMING OLYMPIAD

The Programming Olympiad Aims

The Programming Olympiad aims to identify, encourage and reward programming skills, to promote and encourage the study of programming, to create an awareness of study and employment opportunities.

In 2021 there were 11 791 entries from 231 schools. A total of 4617 learners took part in the first round of the Programming Olympiad from 156 schools. The number of learners that were invited to the second round were 472 from 104 schools of which 348 participated from 97 schools.

Final Round: The 2021 Programming Olympiad invited 19 Finalists to take part in the finals.

The Standard Bank Floating Trophy for the 2021 SA Programming Olympiad and the gold medal were awarded to Minkyum Kim at Reddam House, Western Cape by Mr Admire Gwanzura, Chairman of the board of the Institute of Information Technology Professionals South Africa.

▶► SPONSORSHIP

- Standard Bank sponsored the Programming Olympiad since 2005 till 2021
- The International Olympiad in Informatics (IOI)





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The International Olympiad in Informatics (IOI) Aims

The IOI aims to use the publicity around IOI to recruit participants for our Olympiads, to encourage and reward top learners in the Programming Olympiad, to establish peer group contact with similar learners internationally and to have a benchmark.

- IOI host countries
- 2021 Singapore Online (SA won 1 bronze medal)
- 2022 Indonesia (planned for 7 14 Aug 2022)
- Participation

The four top achievers from the previous year's Olympiad are invited to take part in IOI training.

Selected Team for the 2021 IOI

The following represented South Africa at the 32nd IOI in South Africa remotely (Host: Singapore)

Name	Surname
Qu	Andi
Brent	Butkow
Faran	Steenkamp
Jean	Weight

Team Leaders		
Cilliers	Tian	
Mowzer	Taariq	



▶▶ RESULTS

The practice at the IOI is to issue medals to the top 50% of participants.

- Gold to 1/14th of all participants
- Silver to 2/14th of all participants
- Bronze to 4/14th of all participants

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SPONSORSHIP

South Africa's IOI participation is currently funded by IITPSA. As part of the funding for the Programming Olympiad, there is a need for sponsorship.

6.3. 2021 IITPSA-JCSE ICT Skills Survey

The 11th edition of the JCSE-IITPSA ICT Skills Survey report was published in September 2021, with the support of Professor Barry Dwolatzky at Wits University and Eduflex, who (as usual) supplied the platform for the online questionnaires. The report reflected that many issues remain constant in the sector, such as the lack of ICT in education, which ultimately leads to a shortage of skills entering the labour market.

At the time of the survey, the effects of the COVID-19 pandemic after 18 months of lockdown were mostly felt in the "work from home" environment, requiring rapid adaptation to the technology required to support this. The JCSE-IITPSA Skills Survey model was used to conduct a survey of the Ugandan market in October 2021. The 12th edition of the survey will be carried out in 2022.





6.4 PROFESSIONAL DESIGNATIONS

Following the successful launch of the Pr.CIO designation in 2019, members continue to **seek this recognition of their achievement as C-level practitioners**. SAQA has also registered the designation on the NLRD. We have continued to add to the number of members achieving the valued Professional Member grade (PMIITPSA), which measures the competence of senior practitioners at SFIA level 5 and above. In February 2022, we introduced the broader-based certification of membership at SFIA level 3 and above, with the designation CMIITPSA, which will certify qualifying Associate and Member grades.

6.5 IFIP IP3 ACTIVITY

IP3 recommended that member societies adopt the IFIP Code of Ethics, developed in 2020/21 from the ACM model. The IITPSA Board supported this recommendation and approved the adoption of a slightly customised version of the Code.

6.6 MEMBER SELF SERVICE (MSS)

The implementation of the MyMembership platform from E2 Solutions was successfully completed, on schedule, in August 2021. Member records were uploaded from Goldmine and all new applications for membership and critical skills assessments submitted online thereafter, including payments. The administration staff were trained in the operation of the platform and the assessors are able to complete their tasks online, without the need for hard copy paperwork. At the same time, the Sage accounting system was also moved into the cloud, allowing integration of payments made through MyMembership. After six months of operation, the platform is stable and meeting our expectations. In 2022/23, we will incorporate event management and SFIA skills assessment into the platform and refine the CPD tracking module.





7.1 EASTERN CAPE CHAPTER

IITPSA Eastern Cape Chapter Report 2021-22

2021/22 Past Events

On 11th May 2021 a private mask-to-mask event was held to celebrate Prof Andre's Calitz's prestigious **IITPSA 'Distinguished Service in ICT' Award**. Prof Lynn Futcher presented the IITPSA trophy to Prof Andre at this special event.

However, due to the ongoing lockdown regulations, IITPSA EC Chapter events remained virtual in 2021.

These virtual events included:

- 1st July 2021 'Innovation with a Purpose' talk by Jaco Maas of BKB.
- 21st September 2021 'Teaching Coding in South African Schools' talk by Profs Jean Greyling and Andre Calitz

These events were well attended with some thought-provoking discussions.

Both Profs Lynn Futcher and Kerry-Lynn Thomson were involved in the Intro to SIGCyber event that took place on 5th April 2022.

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Committee Meetings

Five Virtual Committee Meetings were held on 11th March, 22nd April, 10th June, 22nd July and 9th September.

Our first mask-to-mask meeting since lockdown in March 2020, took place on 28th October 2021. This was followed by our end of year function on 9th December 2021, at De Kelder Restaurant.

A further meeting took place on 26th January 2022 to plan for our 2022 AGM and planned activities for the upcoming year. This was followed by mask-mask meetings on 9th March and 6th April 2022.

Committee Changes from February 2022

Our virtual AGM was held on 24th February 2022 using the Zoom platform where two new committee members were appointed, namely: Meggan Naude and Elana Blom. Both Meggan and Elana are from S4 Integration.

Re-elected members included: Prof Lynn Futcher (Chair), Prof Kerry-Lynn Thomson (Vice-chair), Prof André Calitz, Mr Devereaux Joubert, Mr Kuda Nyamutsambira, Mr Harry Paleochoritis, Dr Sue Petratos, Mrs Belinda Samuels (DiData) and Mr Luzuko Tekeni (NMU).

This brings the total number of EC Chapter Committee members to eleven, with five from academia (NMU) and six from industry. The committee is also represented by six females and five males.

-

UPCOMING EVENTS

The following main events have been planned for 2022:

- Virtual talk/panel discussion 19th May 2022 (Dr Marco Pretorius Trivago UX Director
- Teachers' workshop/seminar 21st July 2022. All speakers have been confirmed.
- Our annual Women in IT Event to celebrate Women's Month is scheduled for 17th August 2022. This is planned as a mask-to-mask breakfast event to be attended by 50 to 60 EC Women in IT @ Remos Restaurant.
- Virtual talk/panel discussion 27th October 2022 (topics and speaker/s to be confirmed)
- End of year function 7th December 2022

Other virtual events are still to be decided, as the online environment provides many opportunities to invite experts in the field, both locally and internationally, without a significant cost impact. We need to leverage the technology we have available to us in holding such events.





EC Membership highlights

Prof Kerry-Lynn Thomson received notification of being rated as a **C2-category researcher by the NRF** which is a very **prestigious** accomplishment.

Prof Lynn Futcher was appointed as a **non-executive board member of IITPSA** and she became a Professional Member of the IITPSA.

2 members have been appointed as members of the SIGCyber (Cybersecurity) committee:

- Prof Kerry-Lynn Thomson (Vice-Chair)
- Prof Lynn Futcher (Treasurer)

Prof Andre Calitz is an active member of SIGAIR (Artificial Intelligence and Robotics)

7.2 WESTERN CAPE CHAPTER

The Western Cape Chapter has been very active for the past few years. It has **862 registered members** and **hosts regular events** to equip members with knowledge of different **ICT related topics**. Some of the events they have successfully hosted cover trending and emerging fields in **information technology** such as in Cloud Computing, Mobile Computing and Applications, Big Data Analytics, Automation, Artificial Intelligence and Smart Machines, Virtual and Augmented Reality, Blockchain Data, Cyber-Privacy and Security, Internet of Things etc. The IITPSA Western Cape Chapter **hosted the Chapter AGM** on the 24th of February 2022 at Lagoon beach hotel. The **Grade 12 learners** were awarded the trophies for **Western Cape IT and CAT top performers** in the province (2020 and 2021) at the AGM.

Moving forward, apart from regular events for members, the Western Cape Chapter of the institute plans to **initiate** a **special interest group (SiG) on Security and Cloud computing**. This drive is as a result of the current migration of many businesses to the cloud. In order to keep members abreast and well updated with the emerging trend, the chapter therefore seeks to initiate this special interest group. The chapter will also be **extending outreach programmes** to less-privileged schools and colleges within Western Cape. This will be done to **further** the study of **science** and application of **Information and Communications Technologies (ICTs)** in the near **future**.

7.3 KWAZULU-NATAL (KZN) CHAPTER

The KwaZulu-Natal Chapter had a quieter year from an events point of view, although, as will be seen in the next section, the KZN based Blockchain Special Interest Group was very active. The Chapter Committee, chaired by Marshall Masanga, met fairly regularly and continues to focus on growing ITPSA membership and interest in the KZN region.

During 2021/2022 the following events were hosted by the BlockchainSIG:

- Blockchain Africa 2021 report-back presented via WebinarJam on 31 March 2021.
 This event summarized all the interesting presentations from Blockchain Africa 2021.
- 2. **Game theory and its application in bitcoin** presented via WebinarJam on 29 June 2021. This event discussed the basics of game theory and examined the behavior of the actors in the bitcoin network to see how they aligned to this theory.
- 3. **Is Ethereum2 the future of Blockchain?** presented via WebinarJam on 28 September 2021. This event discussed the technical aspects of the upgrade to Ethereum2 and the impact on the ecosystem.
- NFTs beyond the hype presented via WebinarJam on 22 February 2022. This event provided an understanding of Non-Fungible token technology and the fundamental value proposition.





7.4 GAUTENG CHAPTER

The Gauteng Chapter committee, chaired by Johan Steyn, has held monthly leadership meetings to discuss initiatives and combined Special Interest Group (SIG) events. The decision was made to focus on virtual events for the year, given uncertainties about COVID lockdown regulations for the rest of the year.

The Artificial Intelligence and Robotics SIG (SIGAIR) and the Software Testing SIG (SIGIST) were very active during the 2021 / 22 financial year. The Cybersecurity SIG (SIGCyber) also picked up momentum in the second half of the year.

7.5 GAUTENG SPECIAL INTEREST GROUPS

7.5.1 Artificial intelligence and Robotics (SIGAIR)

We held several successful and well attended virtual events. More events will be planned for the rest of 2022.

7.5.2 Special Interest Group in Software Testing (SIGIST)

Numerous online talks (webinars) were held during the 2021-22 year, providing members and others with thought provoking presentations on a wide variety of topics, including:

- Quality Software in the Al Era (27 Jan 2022)
- Quality Assuring Quality Engineering (21 Oct 2021)
- Being a Human Tester in the Digital World (19 Aug 2021)

7.5.3 CyberSecurity Special Interest Group (SIGCyber)

SIGCyber is an IITPSA Special Interest group (SIG) in South Africa for Cybersecurity and related communities. The SIG was relaunched late 2021. The idea of the SIGCyber is to bring together people from diverse backgrounds who are either practitioners, academics or interested in Cybersecurity. The Cybersecurity domain encompasses technologies, policies, procedures and practices designed to protect organisations, institutions and citizens from attacks.

Based on research from leading sources, the foremost three areas of Cybersecurity concern are People, Application Security and Third Parties. This has been experienced locally, with multiple data breaches and ransomware attacks taking advantage of these weaknesses:

- Data breaches Transunion, Experian, SANSA (South African National Space Agency) and Solarwinds leaked sensitive information caused by untrained employees and targeted 3rd party attacks.
- Ransomware South Africa led the continent last year as the country most targeted by ransomware. A local gym company, Transnet, The Department of Justice and Constitutional Development, and the private hospital group Life Healthcare were successfully targeted by cyber criminals. Key systems were encrypted, and core business operations interrupted.

People are one of the weakest links:

- The hybrid work from home / office / anywhere model has become mainstream and is here to stay. This has increased the adoption of Cloud and Software as Service offerings. Cybercriminals are taking advantage of this, by targeting remote workers with phishing and credential theft attacks.
- There is a global shortage of skilled and qualified cybersecurity resources.
- Insider threats have increased as a result of negligence, criminal insiders, untrained / uninformed employees.
- Ransomware groups are recruiting remote workers from large technology companies to provide them with Virtual Private Network access. This is an easy non-technical hack and relies on social engineering by taking advantage of vulnerable employees who have been financially hit by Covid.

Application development has become more agile to support business needs, with the following impact to Application Security:

- Increased adoption of cheap IOT devices with little or no security and poor implementations. This can allow botnets to be installed and introduce backdoors into otherwise secure installations.
- Adoption of DevOps which aims to shorten systems development cycles. The challenge is to achieve the right balance between speed to market, agility in operations, and security and privacy. Often the latter two are neglected.
- Digital transformation has increased the popularity of code reuse. This provides access to hundreds of open-source libraries and frameworks. This convenience has created another potential attack vector for cyber criminals. For example, the average Java application has 50 open-source vulnerabilities. An example is the Log4J vulnerability, which allows hackers to run any code on vulnerable machines or hack into any application directly using the Log4j framework.
- Insecure Websites are a common vulnerability and easily taken advantage of by hackers to compromise a company's I.T infrastructure.

Third Parties - As a result of cost optimisation, organisations are looking at closer integration, automation and collaboration with their supply chain. Your Third Parties cybersecurity weakness can become yours:

- South African companies are exposed to breaches via international companies, as we utilise their services or products. Examples are Microsoft, Apple, Asus and Mimecast.
- Supply chains are a major focus for threat actors. A supply chain attack targets third-party suppliers who already
 have access to their customer's systems. This is easier than trying to hack customer's systems directly. This is
 effective as it hides the malware inside trusted software which is then distributed to thousands of customers.
 Recent examples are the SolarWinds hack and the Kasaya ransomware attack where thousands of these
 suppliers customers were affected.

The objectives of the group are:

- To promote an understanding of the Cybersecurity domain and the nature of the threats we are facing
- · To promote knowledge sharing of the measures to protect organisations and individuals
- To raise awareness around the issues relating to Cybersecurity
- To encourage research in the Cybersecurity domain.
- To professionalise the domain
- To facilitate discussion, debate and cooperation between Cybersecurity professionals
- To provide thought leadership

7.5.4 Enterprise Architecture Special Interest Group (EASIG)

Although we had a more muted activity year, the EASIG hosted a webinar on the topic: "Enterprise Architects: Is it time to look for another job?" Four industry experts in this space debated the pros and cons of the outlook for Enterprise Architects in the short to medium term.

7.5.5 Entrepreneur Special Interest Group (ESIG)

This SIG hosted two events during the year, the first a webinar entitled "The IT Entrepreneur Version 2.0.2.1.", and the second a webinar on the topic: "Funding an ICT Start-Up", presented by Clive Butkow. We said good-bye to SIG Chair Ravick van der Merwe, as he and his family left for New Zealand. We are looking for willing IITPSA members to help revitalise and drive this Special Interest Group into 2022 and beyond.

7.6 WOMEN IN IT CHAPTER

The mission of the IITPSA's Women in IT Chapter is "Addressing Gender Imbalance in the IT Industry".

Despite the world of ICTs being very conducive to work participation by both genders, women are underrepresented in the ICT Industry and profession in South Africa (and elsewhere).

IITPSA's Women in IT Chapter (WIIT) is focused on helping girls enter the world of IT and supporting career development for Women in IT. See https://womeninit.org.za/

Through the IITPSA and WIIT bursaries, IITPSA is enabling two young women to earn their ICT related degrees at South African universities.









STAKEHOLDER COMMUNICATION AND ENGAGEMENT

8.1 INDUSTRY EVENT PARTNERSHIPS & VIRTUAL EVENTS:

In partnership with our **Public Relations, Marketing and Digital Media partner ITP Communications**, numerous virtual events were hosted on behalf of the IITPSA.

8.2 SOCIAL MEDIA COVERAGE:

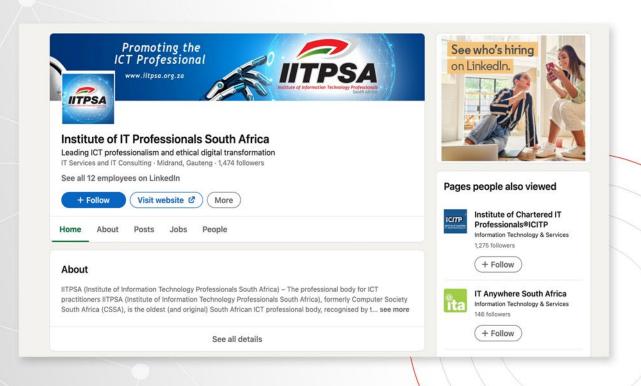




IITPSA currently has two LinkedIn platforms. One is an open group, and the second is a closed group for members only. By the end of the 4th quarter, the **open group** had **1263** members and the closed group for **'IITPSA members only'** had **1471** members.

A more focused approach to increase members was implemented in 2020, and continued in 2021, with an active attempt to invite members from the closed group to the open platform. At present, we continue to post across both platforms.

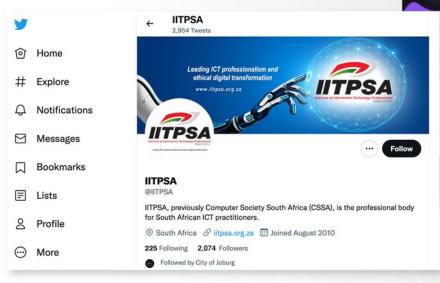
The primary job functions of followers include Information technology, finance, engineering, operations and business development.





TWITTER

IITPSA's Twitter page continued to grow steadily in 2021, reaching up to 2074 followers. The platform grew in Tweet activity. Impressions and engagement increased significantly during the IITPSA Presidents award coverage, Olympiads coverage and IITPSA news events.





FACEBOOK



ITPSA's Facebook page now has 1338 followers. The page was updated daily, Monday-Friday, throughout the 2021 financial year. Posts included links to how to register, notices of upcoming events, Thought leadership pieces, thought leadership videos, Snippets from IITPSA events, ICT Skill survey coverage and general ICT industry news.

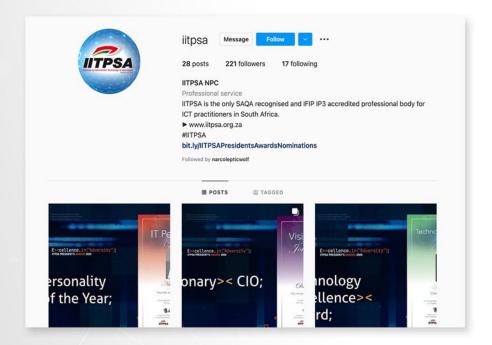




INSTAGRAM



The Instagram platform was **launched in 2020**. As a primarily visually focused platform, IITPSA is utilising brand designed templates with content focused on educating professionals on the role of the Institute, it's levels of membership, news bout IITPSA initiatives, and the promotion of upcoming events. The Instagram account currently has **221 followers**.



The IITPSA Rising STARS PROFILE:

The Business Development department introduced a new recurring segment in the newsletter, the **IITPSA rising stars profile**, where we profile young, upcoming IITPSA members who are doing **extraordinary** things in their careers and CPD journey.

8.3 CPD TRAINING PARTNERS

As an added benefit to IITPSA members, the Institute has been actively **engaging** with prospective **training providers** to fulfill continuous professional development (CPD) needs since 2019.

In the second quarter of 2021, we added two more Accredited CPD Training providers. We now have **three CPD Training providers** in good standing, Deviare, The Joburg Centre for Software Engineering (JCSE) at Wits University and Mobile Applications Laboratory NPC (mLab).

8.4 RETENTION & MEMBERSHIP GROWTH

In line with the IITPSA Board's strategic objective of 'Stakeholder Engagement' a refreshed, focused approach to membership retention has been taking place during the year under review. Unfortunately, it continued to be negatively impacted by the COVID-19 restrictions.

There was, however, a pleasing increase in membership renewals in January / February 2022.



ABRIDGED 2021/2022 ANNUAL FINANCIAL STATEMENTS

IITPSA NPC

(Registration Number: 1958/001036/08) Annual Financial Statements for the year ended 28 February 2022

Statement of Financial Position as at 28 February 2022

Figures in Rand	2022	2021
Assets		
Non-Current Assets		
Property, plant and equipment	96 625	92 954
Current Assets		
Trade and other receivables	192 080	76 678
Cash and cash equivalents	22 149 688	23 862 483
	22 341 768	23 939 161
Total Assets	22 438 393	24 032 115
Equity and Liabilities		
Equity		
Retained surplus	19 763 404	21 936 715
Liabilities		
Current Liabilities		
Trade and other payables	516 795	169 369
Deferred Income	1 608 465	1 509 374
Provisions	549 729	416 657
	2 674 989	2 095 400
Total Equity and Liabilities	22 438 393	24 032 115



Figures in Rand	2022	2021
Revenue	7 440 068	6 004 563
Cost of sales	(1 481 345)	(1 149 057)
Gross surplus	5 958 723	4 855 506
Other Income	1 119 506	1 003
Operating expenses	(10 191 378)	(8 329 274)
Operating deficit	(3 113 149)	(3 472 765)
Investment revenue	939 838	1 259 006
Deficit for the year	(2 173 311)	(2 213 759)
Other comprehensive income		-
Total comprehensive deficit for the year	(0.170.011)	(2 213 759)
	(2 173 311)	
	Retained surplus	
	Retained	Total equity
Statement of Changes in Equity	Retained surplus	Total equity
Statement of Changes in Equity Balance at 01 March 2020	Retained surplus 24 150 474	Total equity 24 150 474
Statement of Changes in Equity Balance at 01 March 2020 Deficit for the year Other comprehensive income	Retained surplus 24 150 474	Total equity 24 150 474 (2 213 759)
Statement of Changes in Equity Balance at 01 March 2020 Deficit for the year	Retained surplus 24 150 474 (2 213 759)	Total equity 24 150 474 (2 213 759)
Statement of Changes in Equity Balance at 01 March 2020 Deficit for the year Other comprehensive income Total comprehensive deficit for the year	Retained surplus 24 150 474 (2 213 759) - (2 213 759)	Total equity 24 150 474
Statement of Changes in Equity Balance at 01 March 2020 Deficit for the year Other comprehensive income Total comprehensive deficit for the year Balance at 01 March 2021	Retained surplus 24 150 474 (2 213 759) - (2 213 759)	Total equity 24 150 474 (2 213 759) (2 213 759)

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Figures in Rand	2022	2021
Cash flows used in operating activities		
Cash used in operations	(2 615 597)	(4 028 949)
Interest Income	939 838	1 259 006
Net cash used in operating activities	(1 675 759)	(2 769 943)
Cash flows used in investing activities		
	(58 169)	(53 389)
Purchase of property, plant and equipment		(55 565)
Sale of property, plant and equipment	21 133	1 003
	21 133 (37 036)	,
Sale of property, plant and equipment Net cash used in investing activities		1 003 (52 386)
Sale of property, plant and equipment	(37 036)	(52 386) (2 822 329)







10 ABBREVIATIONS

AfICTA African ICT Alliance

AI Artificial Intelligence

AMIITPSA Associate Member of the Institute

B- BBEE Broad-Based Black Economic Empowerment

CAT Computer Applications Technology

CEO Chief Executive Officer

CIO Chief Information Officer

CISO Chief Information Security Officer

CPD Continuing Professional Development

CTO Chief Technology Officer

DOE Department of Education (Provincial)

EC Eastern Cape

FIITPSA Fellow of the Institute

HDI Historically Disadvantaged Individual

ICT Information and Communications Technologies

IFIP International Federation for Information Processing

IITPSA Institute of Information Technology Professionals South Africa

Internet of things

IP3 International Professional Practice Partnership

IRL In Real Life

ISACA Information Systems Audit and Control Association

ISC2 International Information System Security Certification Consortium

IT Information Technology

JCSE Joburg Centre for Software Engineering (Wits University)

KZN KwaZulu Natal

LLL Lifelong Learning

MICT SETA The Media, Information and Communication Technologies Sector Education and Training Authority

MIITPSA Member of the Institute

NPC Non-Profit Company

NQF National Qualifications Framework

PGITO Provincial Government Information Technology Officer

PMIITPSA Professional Member of the Institute

Pr.CIO Professional CIO Member of the Institute

SAIEE South African Institute of Electrical Engineers

SAQA South African Qualifications Authority

SASTQB South African Software Testing Qualifications Board

SIG Special Interest Group

SIGAIR Special Interest Group in Artificial Intelligence and Robotics

SIGCyber Special Interest Group in Cybersecurity

SIGIST Special Interest Group in Software testing

SQA Software Quality Assurance

STEM Science, Technology, Engineering and Mathematics

VR Virtual Reality

WC Western Cape

WCC World Computer Congress

WIIT Women in IT







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