

Building Resilient Economies, One Connection at a Time

August 2025 – Woman's Month

This Women's Month, we reflect on the theme from the Department of Women, Youth, and Persons with Disabilities: "Building Resilient Economies for All". In the ICT sector, few stories embody that spirit as powerfully as Nomso Kana, founder and owner of SimSciex Technologies. Her journey, from nuclear science to pioneering broadband access in underserved communities, highlights the power of resilience, innovation, and leadership in shaping inclusive digital economies.



Kana's roots in problem-solving run deep. Her inspiration to enter the ICT industry came during her time as a nuclear scientist at the Pelindaba reactor, where she witnessed the limitations of connectivity on campus.

"We struggled with connectivity on the campus," she recalls. "I studied the challenge and came up with a solution for the organisation. Back in those days, fixed wireless was not popular, and fibre-to-the-business was not widely implemented in the industry. I furnished that solution and decided to start a business. It's been 11 years since those events."

Her scientific background has equipped her with a methodical approach to addressing challenges. "My background as a nuclear scientist taught me to always be analytical, synthesise the problem to the last atom, then build a solution from there. I realised I fit perfectly in the telecoms and broadband infrastructure space."

That leap of faith gave rise to SimSciex Technologies, a multifaceted company offering broadband access, cybersecurity, and digital transformation services.

Bringing Connectivity to the Underserved

Access to affordable, reliable internet remains one of South Africa's most pressing challenges, particularly in rural areas. Through projects funded by the Broadband Access Fund (BAF) and SA Connect, SimSciex Technologies has turned this challenge into an opportunity.

"Our ISP benefited from the BAF/SAC funding project as we went to the most underserved and greenfield places and built a community network from the ground up," Kana explains. "This helped us to bring to reality the importance of affordable data for residents in deep rural areas."

Her company's model is simple yet transformative: offering seamless, fast data at prices as low as R2 or R5 for daily use. This model, inspired by traditional internet cafés, drastically reduces costs from R30 per hour to just R5, ensuring that connectivity is no longer a luxury but an accessible service.

The impact is clear in the communities SimSciex serves. Schools now have access to e-learning content; learners can study through digital platforms hosted on the company's site; and youth are trained to become "Local Tech on Call," maintaining community networks and gaining employable skills.

The Power of Digital Literacy

One of Kana's strongest beliefs is that digital literacy is the gateway to economic independence.

"Digital literacy contributes to the economic independence of an individual," she explains. "The prerequisite skills of internet etiquette, fundamental cybersecurity, Microsoft Office usage, just understanding these can gain an individual a remote job or entrylevel reception role. And all of these can be learned online with reliable and affordable data."

Through MICT Seta partnerships, SimSciex has trained 25 unemployed matriculants and graduates in IT technical support, equipping them with certifications and pathways into the workforce. Working with universities and training providers across the Northern Cape, the company is building a new generation of digital-ready professionals.

Overcoming Rural Connectivity Challenges

Deploying networks in rural areas is not without obstacles. Kana highlights the "existence of greenfields in this day and age", areas where communities have little or no exposure to internet services. "The challenge commences from building a layer 2 to a layer 3 network and then convincing the community to use the internet, while they are not used to it," she says. "We run activations starting from digital literacy, all for the sake of the community gaining interest and consuming the internet to better themselves."

This approach underscores a key principle: infrastructure is only half the battle. Real inclusion comes when communities see the internet as a tool to improve education, livelihoods, and everyday life.

Innovation and the Future of SimSciex

Looking ahead, Kana envisions SimSciex at the cutting edge of connectivity and AI. "We are working in-house to build an NLP-based predictive AI model for ISPs," she reveals. "In addition, we are working towards a niche market in deploying WiFi 7 layer 2 equipment."

The company's growth plans also include scaling its workforce and deepening partnerships with academic institutions to continue grooming the next wave of ICT talent. By aligning training programs with global skills frameworks from organisations like the World Economic Forum and McKinsey, SimSciex ensures its initiatives are sustainable and globally competitive.

Women Empowering Women in Tech

As a woman leading in the male-dominated ICT sector, Kana takes pride in inspiring and empowering young women. Her initiatives focus on encouraging varsity students at a critical stage of career choice to pursue technical disciplines.

"I would say the most impactful results I have seen are seeing women undertake courses to improve their dominant skills, whether in computer science, engineering, or related fields," she says.

Conclusion

Kana's vision for SimSciex Technologies aligns seamlessly with this year's Women's Month theme. By making internet access affordable, equipping communities with digital literacy, and innovating for the future, her work is helping build resilient economies across South Africa.

"Through our infrastructure deployments, we've managed to create opportunities that go beyond connectivity," she reflects. "It's about equipping people with the skills, tools, and confidence to shape their own futures."

As South Africa continues to confront the digital divide, leaders like Nomso Kana remind us that resilience is not just about enduring challenges; it is about transforming them into platforms for growth, innovation, and empowerment.

