

HACKATHON

**PUTTING
SOUTH AFRICA'S
INNOVATION
DATA TO WORK**

11-13 September 2018

Level 5 | Alcove | Cape Town Stadium



THE CHALLENGE, IN DEPTH

Why do we need to put South Africa's innovation data to work?

The now late Kofi Annan famously said 'Governing without data is like driving without a dashboard'. In an age of autonomous vehicles, augmented reality headsets and voice assistants, how might we interpret this injunction? In our very challenging local South African and African contexts, and in an era of fake news and the so-called 'post-truth society', what does it mean for businesses, government departments and civil society to 'govern' with (and without) data?

At one level, this Hackathon is about making the discovery of answers to those questions an inclusive and, at the same time, fun exercise, by looking at one key national dataset—business innovation data. For the National Advisory Council on Innovation and for the Centre for Science, Technology and Innovation Indicators at the Human Sciences Research Council, this couldn't be a more compelling reason to have initiated this event.

At another level, it is about breaking down traditional silos that surround researchers, policymakers, data scientists, communities, graphic designers, journalists and developers—and prevent them from coming together to make sense of challenges together. This event offers us a glimpse of a multidisciplinary way of working and interacting that we should embrace in a world where the 'future of work' remains fiercely contested.

At yet another level, the Hackathon is about the recognition that research and data is no good if it gathers dust on a shelf; we need to find novel ways to activate data, to bring it to life, to make it work for each other. We are especially excited by the range of technical, leadership and creative expertise within each team to help us to tackle this key challenge.

At this Hackathon we have represented in one room individuals from universities, advertising schools, news agencies, data science academies, entrepreneurs, government workers, and career hackers. That's an achievement in and of itself. Let us hold each other to the highest standards of performance and team work, but more importantly, learn new things and build new friendships in data.

We should look forward to an enjoyable, creative and challenging process.

Dr Glenda Kruss

*Director: Centre for Science,
Technology and Innovation
Indicators, Human Sciences
Research Council*



Dr Mlungisi Cele

*Acting Chief Executive Officer:
National Advisory Council
on Innovation*

THE JUDGES

Kgomotso Matlapeng, *Senior Policy Analyst, Department of Science and Technology (Chief Judge)*



Kgomotso Matlapeng is Senior Policy Analyst, Science and Technology Investment, at the Department of Science and Technology. In this role, she works on national R&D, business innovation, and IP and technology transfer surveys, as well as facilitates national, Africa-wide and global stakeholder engagement on STI measurement. She has also worked on financial stability analysis of the banking sector at the South African Reserve Bank.

Tim Gane, *Director, Private Label*



Tim Gane is a co-owner of digital development agency Private Label Web Solutions, and has a wealth of experience in strategic digital consulting to companies across varying sectors to improve their digital products, platforms and marketing strategies. He is passionate about the end-user, digital products, their technologies, data, and the real analytical benefit they can bring to organisations to both improve efficiencies and increase revenues.

Bernd Oellerman, *Director: Regional Industrial Development, the dti*



Bernd Oellermann is currently director in the Regional Industrial Development unit of the Special Economic Zones and Economic Transformation division of the Department of Trade and Industry. His background covers sustainable development, renewable energy, water, health, agriculture, engineering, R&D, education, ICT, mining and the financial sector in government, industry, commerce, labour, communities, youth, academia, research and non-profit environments.

Molefi Mathibeli, *Systems Developer, Department of Science and Technology*



Molefi Mathibeli is a Systems Developer at the Department of Science and Technology. He has a multimedia background, combined with scripting and technical programming, and has developed extensive knowledge in modern day web applications for enterprises and small businesses. He is part of a multi-disciplinary team in the Department, with the role of digitising business processes.

Prof Thomas Thurner, *Research Chair for Innovation in Society, Cape Peninsula University of Technology*



Prof Thomas Thurner joined CPUT in April from the Higher School of Economics in Moscow, Russia, where he established himself as a leading researcher in innovation management with a specific focus on state-owned enterprises. Thurner is developing and support research activities in the Faculty of Informatics and Design and the Faculty of Health and Wellness Sciences. His research has been published in leading journals like the *International Journal of Innovation Management*.

Cheryl Moses, *Chief Researcher, HSRC's Centre for Science, Technology and Innovation Indicators*



Cheryl Moses is a Chief Researcher at the HSRC's Centre for Science, Technology and Innovation Indicators. She holds a Master's Degree in Medical Biosciences and a Bachelor's Degree in Zoology both from the University of the Western Cape (UWC). Her current area of research includes innovation studies within the National System of Innovation in South Africa. She has been working in the area of Knowledge Economy Indicators since 2006, and is leading a large team performing the South African Business Innovation Survey 2014-2016.

Adi Eyal, *Director, OpenUp*



As an organisation, I believe that OpenUp is testing boundaries. We are pioneers in this space in South Africa. While we follow in the footsteps of other civic tech organisations internationally, every country has its nuances, difficulties and challenges. We're feeling our way around, and hopefully challenging boundaries and walking the road less travelled.

PROGRAMME

DAY 1 | 11 September 2018 – COMING TOGETHER, KICKING OFF

Facilitated by Dr Pieter van Heyningen, SustNet

TIME	ACTIVITY
08:30 – 09:00	REGISTRATION & COFFEE/TEA
09:00 – 09:10	WELCOME <ul style="list-style-type: none">• Dr Pieter van Heyningen• Dr Glenda Kruss• Dr Mlungisi Cele
09:10 – 10:10	PANEL DISCUSSION “The potential of innovation data for decision-making across sectors” <ul style="list-style-type: none">• Dr Glenda Kruss, Director, Centre for Science, Technology and Innovation Indicators, Human Sciences Research Council• Dr Petrus Letaba, Senior Specialist: STI Measurements and Evaluation• Audrey Verhaeghe, Chair, SA Innovation Summit• Kgomoatso Matlapeng, Department of Science and Technology• Graham Smale, Founder, Facilitator and Coach, innoSindo OPEN DISCUSSION WITH AUDIENCE
10:10 – 10:30	COFFEE/TEA BREAK
10:30 – 11:45	CREATIVE USER-PERSPECTIVE DESIGN EXERCISE “Gaining a user perspective for system design” <ul style="list-style-type: none">• Facilitated by Dr Pieter van Heyningen, SustNet
11:45 – 12:15	KICKSTARTER & BRIEFING SESSION – (1) “Outline of the Hackathon Challenge & Expected Outcomes” <ul style="list-style-type: none">• Dr Petrus Letaba, National Advisory Council on Innovation• Gerard Ralphs, Centre for Science, Technology and Innovation Indicators, Human Sciences Research Council
12:15 – 13:00	LUNCH WITH MENTORS & OBSERVERS
13:00 – 14:00	KICKSTARTER & BRIEFING SESSION – (2) “Going in-depth into the data and the tech” <ul style="list-style-type: none">• Dr Moses Sithole, Centre for Science, Technology and Innovation Indicators, Human Sciences Research Council• Senzo Dlamini, National Advisory Council on Innovation QUESTIONS & ANSWERS
14:00 – 18:00	TEAM WORKING SESSION
18:00 – 19:00	DINNER
19:00 –	KEEP WORKING TILL LATE

DAY 2 | 12 September – CHECKING IN, DEEPENING THE WORK

Facilitated by Dr Pieter van Heyningen, SustNet

TIME	ACTIVITY
08:30 – 09:00	REGISTRATION & COFFEE/TEA
09:00 – 12:00	CHECK-IN SESSION WITH MENTORS & FACILITATOR “World Café with key experts for interim feedback and guidance”
12:00 – 13:00	LUNCH
13:00 – 18:00	TEAM WORKING SESSION & SUMMIT TALKS
18:00 – 19:00	DINNER
19:00 –	KEEP WORKING TILL LATE

DAY 3 | 13 September - FINALISING PITCHES, PRESENTING SOLUTIONS

Facilitated by Dr Pieter van Heyningen, SustNet

TIME	ACTIVITY
08:30 - 09:00	REGISTRATION & COFFEE/TEA
09:00 - 13:00	FINAL CHECK-IN WITH MENTORS & FACILITATOR "Submitting your work and preparing your pitch"
13:00 - 14:00	LUNCH
14:00 - 16:00	ATTEND SUMMIT TALKS
15:00 - 16:00	CLOSED JUDGES BRIEFING SESSION
16:00 - 17:30	PITCH & JUDGE SESSION

TEAMS & MENTORS

TEAM 1	TEAM 2	TEAM 3	TEAM 4
Mvuyisi "Lizwi" Nelani Vusumzi Mzimvubu Mthunz Qagna Viwe Aubrey Sigenu Sharon Nobuntu Ngalo Tapiwa D Muswere Mentor: Suzanne Wolhuter	Lungisa Khephe Ismail Ebrahim Esethu C Mangaliso Xinman Liu Ntlahla Nkukwana Sibongile Mongadi Mentor: Dr Glenda Kruss	Timothy Crombie Teballo Kgomo Shandu Nthai Nhlanhla Malaza Sabela Mabuza Mdu Mkhonza Mentor: Prof. Michael Kahn	Thapelo Marakala Mveliso Mtana Alungile Duli Sibusiso Innocent Ziqubu Xolisa Thamarhana Noloyiso Ntshinga Mentor: Dr Hamilton Mphidi
TEAM 5	TEAM 6	TEAM 7	
Ludwe Luxande Lindiwe Binda Bheki-nkosi Austin Khosa Siphetho Velaphi Janine Ritchie Lesego Phiri Mentor: Graham Smale	Sinethemba Makoma Marcia Joubert Teboho Qoloshla Dr Firdous Khan Christopher Mudongo Nape Mothiba Mentor: Claire Busetti	Khutjo Motlafi Terrence Shalang Rudzani Maila Dr Hrudn Gunnsteindottir Athi SJ Stevens Thato Dube Mentor: Linda Nordling	

FACILITATOR

Dr Pieter van Heyningen, *Founder & Partner, SustNet*



I am currently the founder and partner of SustNet, a private company aimed at providing services to develop innovation systems and project management for sustainability. We work with government, academia and business, NGO's and international clients. We specifically try to bring them together for various innovation projects and programmes, and also aim to manage/consult to various innovation districts across the country, Africa and the world. I remain a part-time academic, after completing my PhD and have a formal extraordinary position at the School of Public Leadership, Stellenbosch University.

GO-TO PEOPLE

- Gerard Ralphs 072 148 2036 (General assistance)
- Benny Nhlapo (Catering)
- Senzo Dlamini (Tech)
- Dr Moses Sithole (Data)

MENTORS

Dr Glenda Kruss, Director, Centre for Science, Technology and Innovation Indicators, HSRC



Dr Glenda Kruss is the deputy executive director and head of the Centre for Science, Technology and Innovation Indicators at the Human Sciences Research Council. She is a skilled facilitator with wide experience of conceptualising and moderating multi-stakeholder policy roundtables, bringing together policy makers, researchers and practitioners. She has conducted research mapping how universities and public research institutes link with firms, how they build their capabilities to interact with marginalised communities to diffuse STI to enhance livelihood opportunities, as well as on IID strategy and STI policy.

Graham Smale, Founder, Facilitator & Coach, innoSindo



Graham has over 35 years of business experience spanning many types of business. He has strong operational, technical and strategic business skills, combined with a strong academic background in business. He has a particularly strong background in risk management, both in financial markets and at the corporate governance level, which makes for a very interesting combination with his passions for creative innovation and disrupting the status quo. Graham believes in continual personal development and developing new mental models of how the world works. He believes in radical collaboration and combining skepticism with deep listening to achieve results with and through others. As a result, Graham excels as a business mentor and strategic facilitator.

Prof. Michael Kahn, Extraordinary Professor, University of Western Cape & Stellenbosch University



Professor Michael Kahn is a policy analyst and evaluator of research and innovation. He has maintained a lifelong commitment to development—of people, systems and self. To meet these goals, he has served as advisor to the Ministers of Education, and Science and Technology, was Chief Director (Informatics) in the Gauteng Government, Acting Director of the Centre for Education Policy Development, Professor of Science Education in Botswana and South Africa, and an Executive Director of the Human Sciences Research Council. He is Extraordinary Professor in the Centre for Research on Evaluation, Science and Technology at Stellenbosch University, and a member of its DST-NRF Centre of Excellence in Scientometrics and Science Policy, and Extraordinary Professor of the University of the Western Cape.

Linda Nordling, Managing Editor, Research Africa



Linda Nordling is a journalist and editor based in Cape Town, South Africa. She specialises in reporting on African science policy and funding. She is the managing editor of *Research Africa*, an online funding news service for African researchers. She also contributes news and features on African science to a variety of international publications, including *Nature* and *Science*. She has mentored several African science journalists and led seminars on science and the media. She is originally from Sweden and trained and worked in the UK before moving to South Africa in 2006. She has a special interest in how African research is portrayed globally as well as in equitable research partnerships between developed and developing countries.

Dr Hamilton Mphidi, Deputy Director: Innovation Support & Technology Transfer, Vice Rectorate: Research, Innovation & Engagement, Tshwane University of Technology



Dr Hamilton Mphidi is currently the Deputy Director responsible for Innovation Support and Technology Transfer at the Vice Rectorate: Research, Innovation and Engagement, Tshwane University of Technology. Prior to joining TUT, he spent more than 10 years in the technology innovation space in Information and Communication Technology (ICT) sector during this time he held various positions at the University of Pretoria, Embassy of the United States of America, Financial and Fiscal Commission and Sasol Technology respectively. His academic qualifications include a Master's degree and a PhD in Information Science from the School of Information Technology, University of Pretoria. He also held various board positions on several centres/incubators, and other fiduciary and advisory roles.

Suzanne Wolhuter, Technology Transfer Manager, Rhodes University



Suzanne Wolhuter completed her Honours Degree in Molecular Medicine and Haematology at the University of the Witwatersrand in 2011. She stayed on at Wits to complete her Master of Science in Medicine with the Hepatitis Virus Diversity Research Unit (HVDRU), led by Professor Anna Kramvis. Suzanne has since founded and been the director of a consulting company in Cape Town, Prequel Consulting that was tailored to support innovation, startups and technology development. Suzanne is the Curator for the Innovation Bridge Portal, an online platform aimed at creating a network and support system for innovators, technology developers, and funders in the NSI space. Most recently, she took up the position of the Technology Transfer Manager at Rhodes University where her activities are concentrated around establishing the Technology Transfer Office and commercialising biotechnology emanating from the University. Further, she founded and facilitates the Lean Startup Coffee and the E'Kasi Biz Community in Grahamstown weekly, aimed at inspiring Entrepreneurs to create businesses and learn about business management and innovation.

Claire Buseti, NACI Counsellor & Government Liaison, SiMODiSA



Claire Buseti holds an MBA from the University of Witwatersrand, with 20 years of experience in private equity and investment banking. She is an investment committee member of London based Ariya Capital's Sub-Saharan Clean Energy Fund and FirstRand's Vumela Enterprise Development Fund. As a Senior Portfolio Manager at Eskom Pension & Provident Fund, Claire has listed equity investment experience and has extensive knowledge in venture capital and the funding of early-stage, high growth ventures.

THIS HACKATHON IS A COLLABORATION OF



science & technology
Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA



CeSTII
Centre for Science, Technology
& Innovation Indicators

