# Innovation in Times of Socio-Economic and Political Complexity

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Manager, Hub for the African City of the Future,
University of KwaZulu-Natal
Durban
South Africa



AfriHUB



# What keeps you awake at night?

political uncertainty

crime

stagnant economy

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The clock is ticking……



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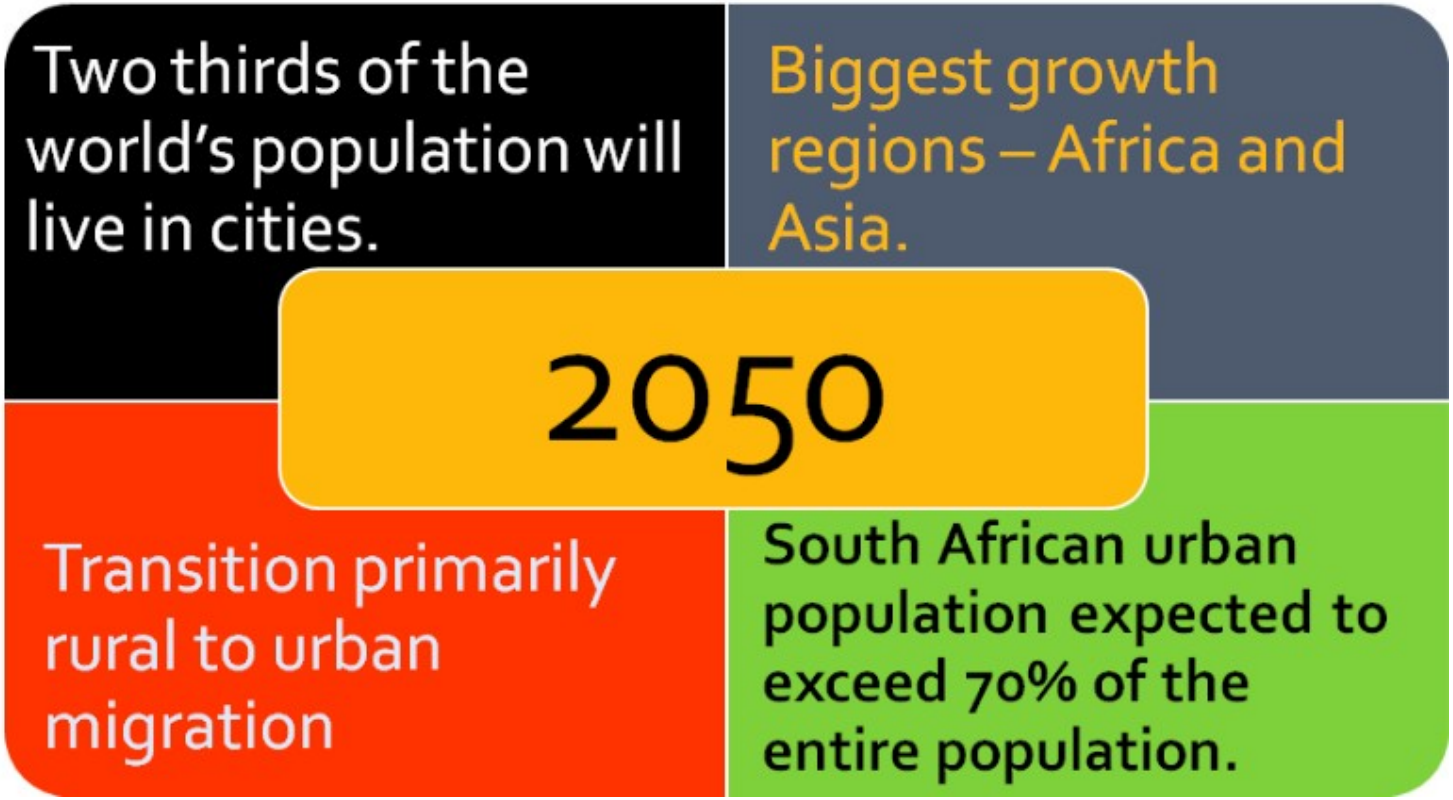
# Emerging Challenges



# Coping with Complexity

This country (South Africa) is belligerent, restless, unruly, beautiful, surprising, hopeful, difficult, challenging and different. It is a frontier society. The shape and nature of its frontiers, like any interesting country, constantly change. But the pace of change in South Africa is particularly dramatic. Change permeates every aspect of our personal lives, our working lives and our idea of citizenship.

*Professor Nick Binedell, former Director of the University of Pretoria's Gordon Institute of Business Science*



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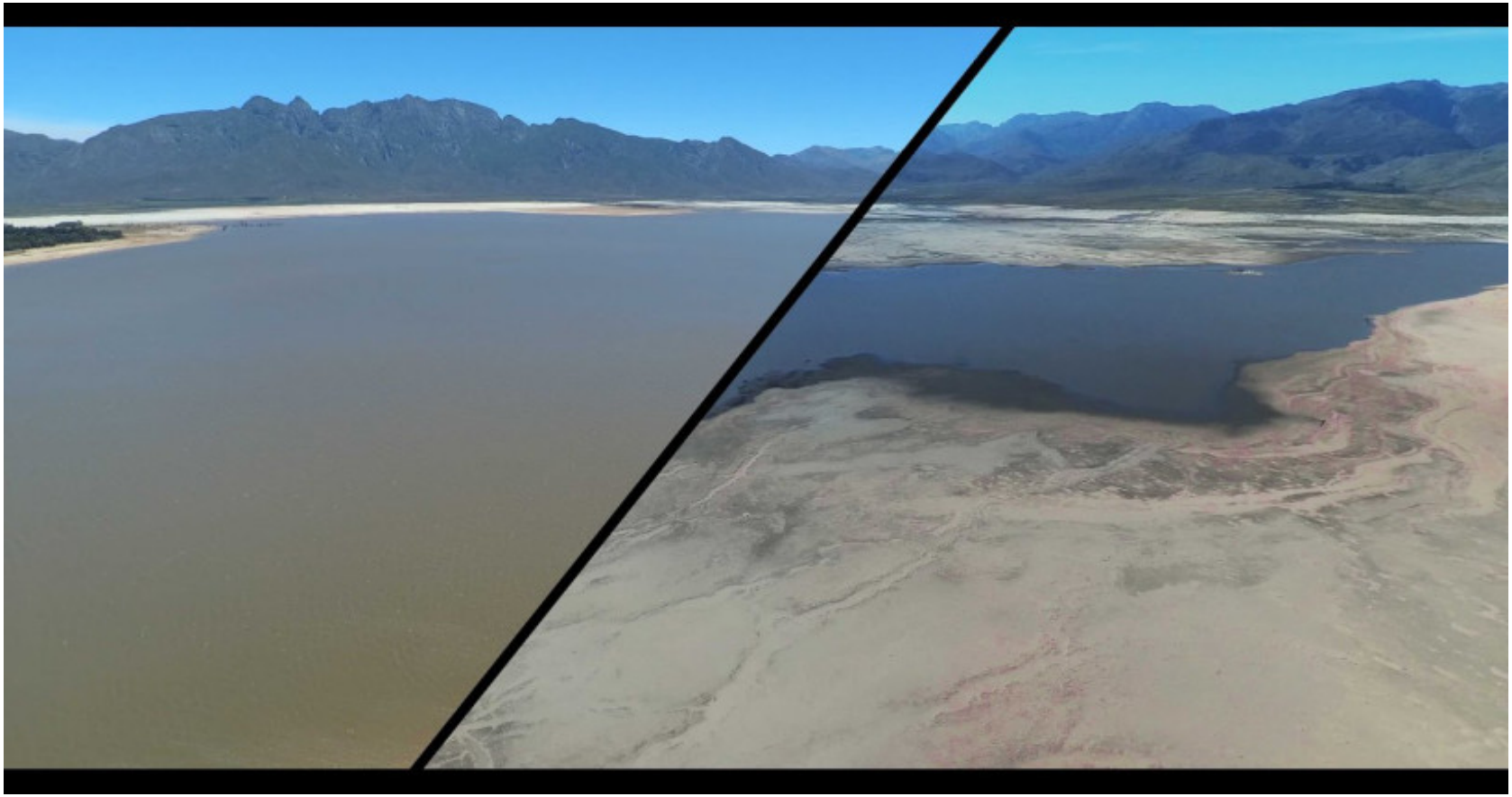
# Disasters don't happen; they become!



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# Africa/Durban



Africa; resource rich (bulk of world's non-renewable resources); world's youngest population; 6 of the 10 fastest growing economies in the world; gains in education; disease control.

*(UN Millennium Development Goals Progress Report 2014)*

**BUT**

## in Durban....

Poor infrastructure; energy constraints; joblessness; conflict.....



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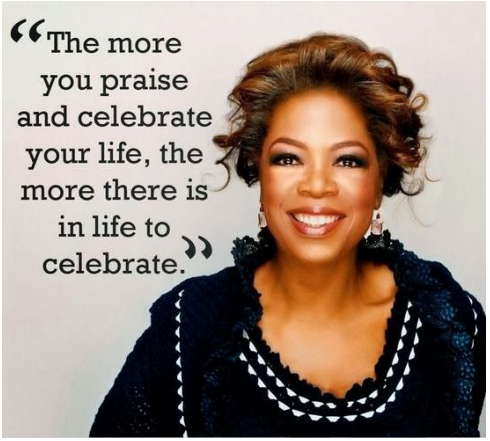
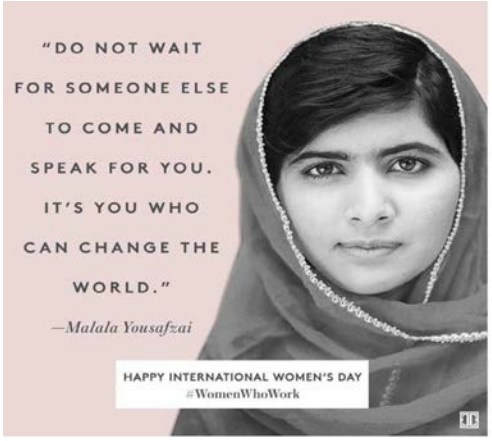
# What are we doing about it?

How do we define our value?

How do we measure our impact?

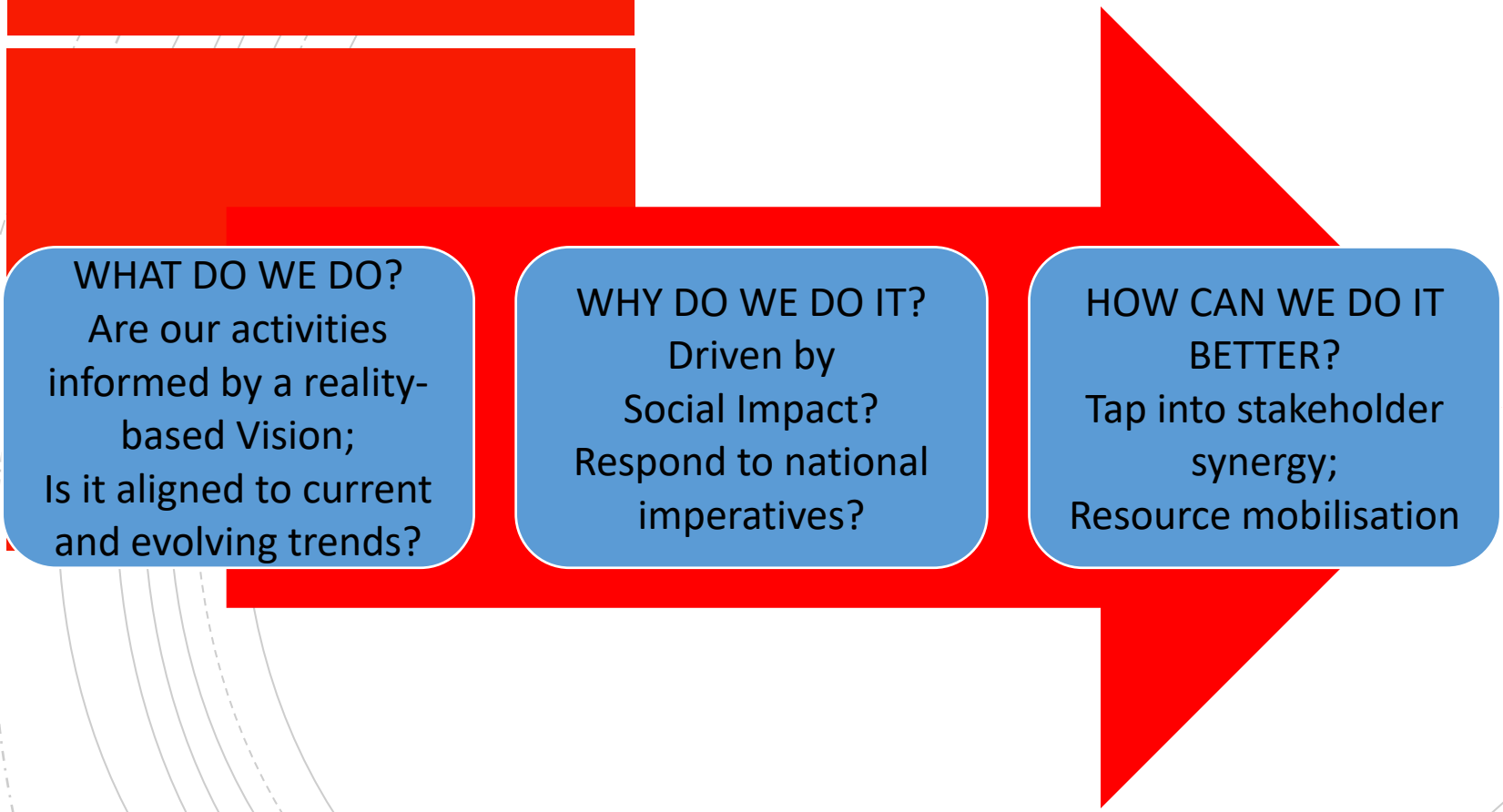
# What can we do?

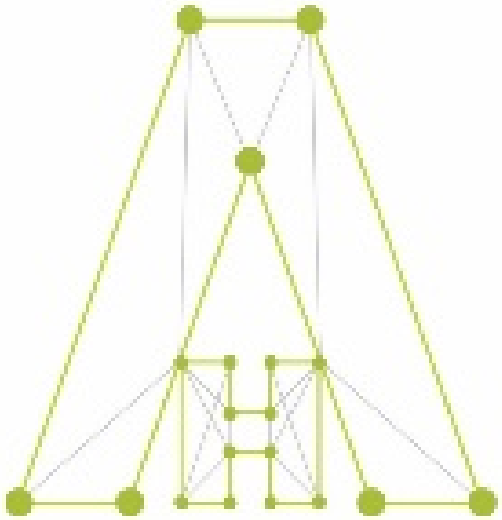


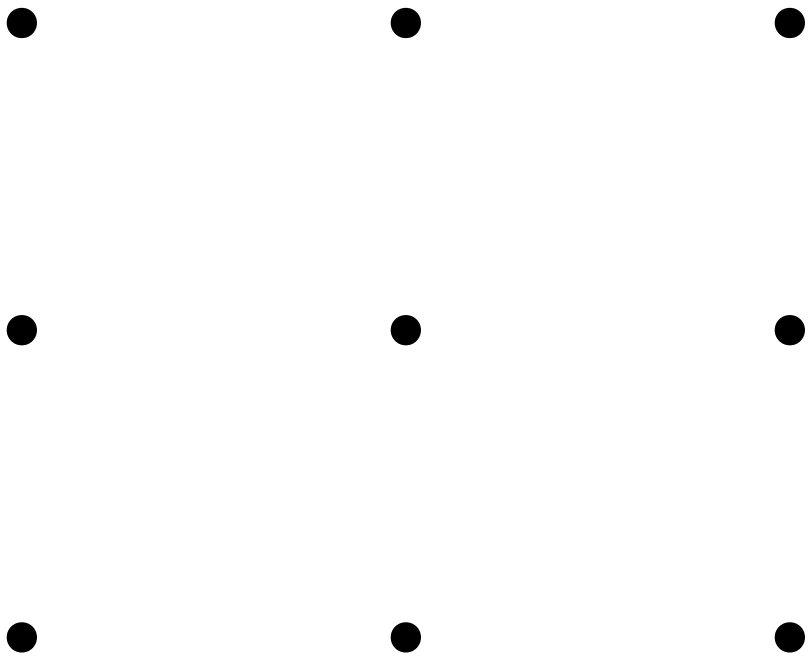

*The illiterate of the 21st Century will not be those who cannot read and write, but those who cannot learn, unlearn and relearn.'*
*Alvin Toffler, Future Shock, 1970*

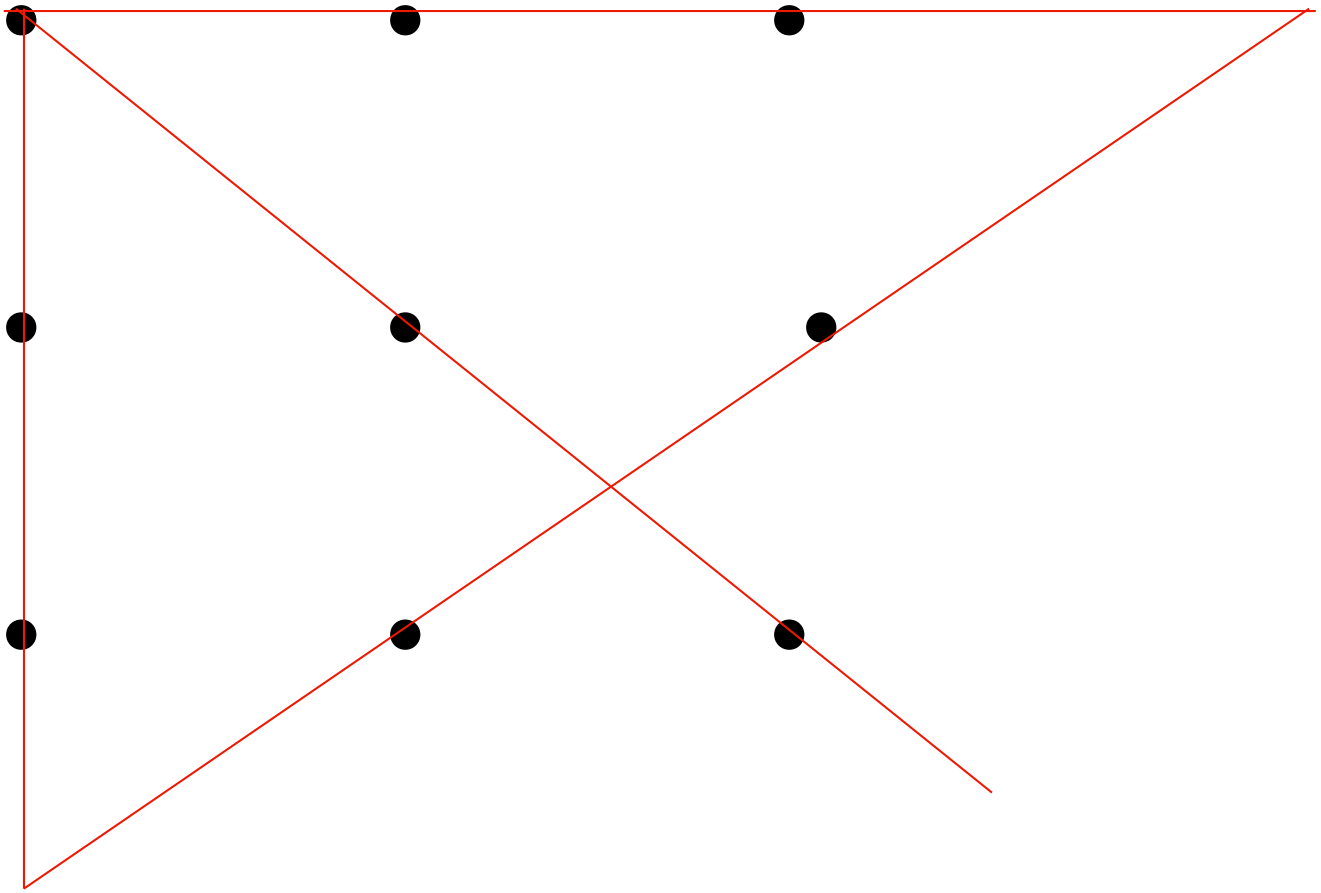
# UKZN Engineering's Role in the Complex Knowledge Economy?

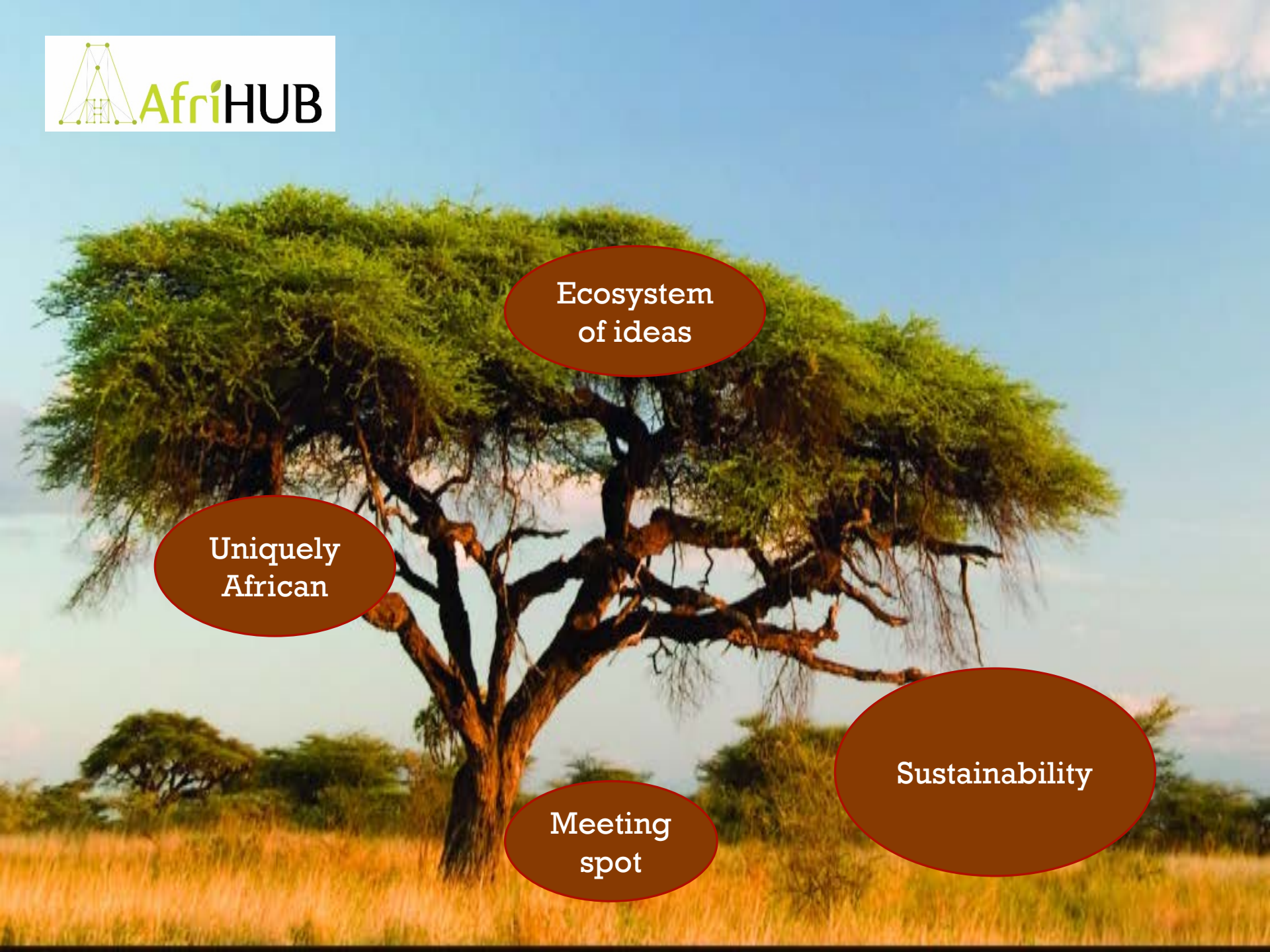




AfriHUB

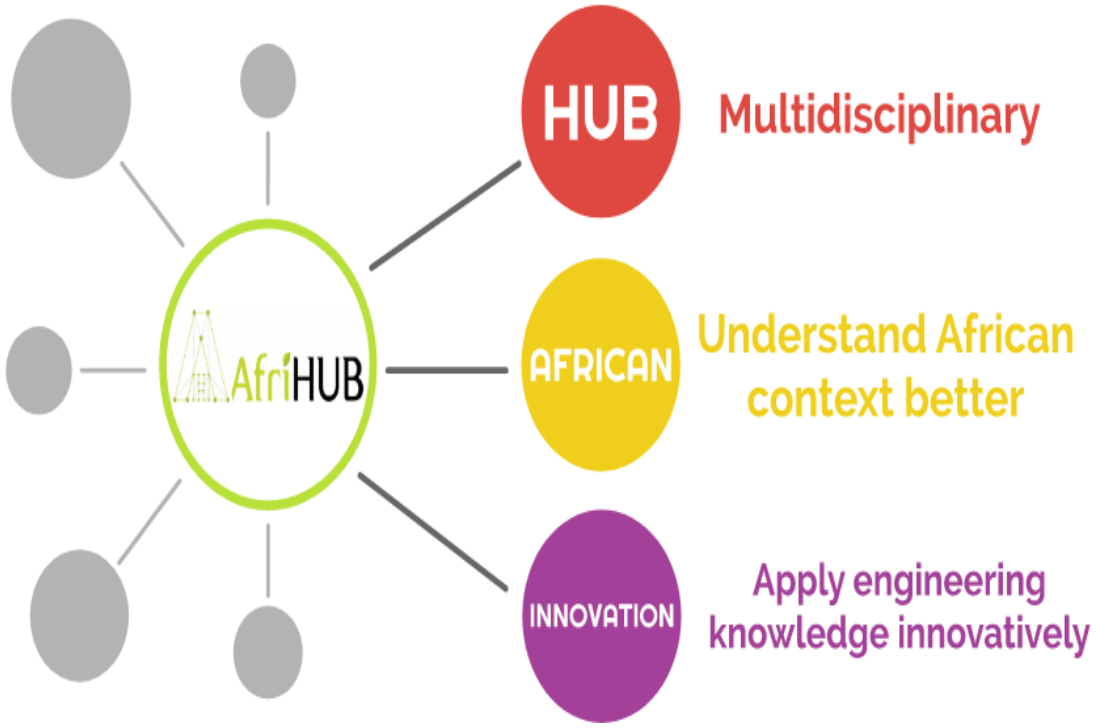





AfriHUB
Ecosystem of ideas
Uniquely African
Sustainability
Meeting spot

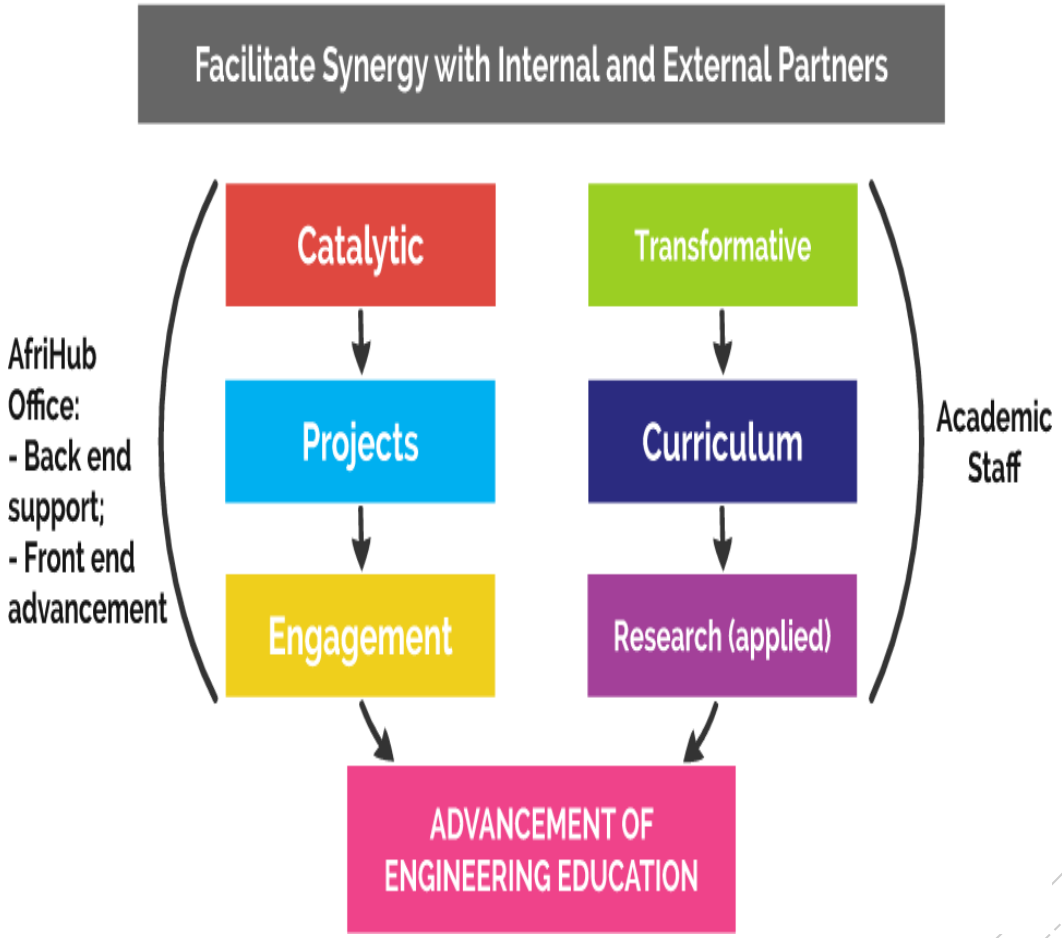
# Establishment of AfriHub

**Broad Mandate:**




To advance engineering through capacity building; branding; multi-disciplinary engagement; marketing; inserting its value (through 'smart city' solutions); explore growth oriented synergies within a broader stakeholder community; resource mobilisation.

# Operating model of the AfriHub



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# Innovation for the Future

**Pre-requirements:**

- Skills and competencies upgrades
- Mindset shifts
- Behavioural changes
- Personal commitment

**Enhancement of the human dimension**

↓

**Opportunity of socio-economic growth**



AfriHUB

Building and nurturing innovation

Pre-requirements:

- Skills and competencies upgrades
- Mindset shift
- Behavioural changes
- Personal commitment

EDUCATION

Enhancement of the human dimension

Opportunity of socio-economic growth



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# EduValue leads to Growth



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# The roll-out plan is a 3 phase step-up project:

**Ignition (3-6months)**

**Aim: Brand building; Grow stakeholder confidence**

Marketing (digital; print; social) media;

Develop partnerships (eThikweni; IDRC);

Low key student-centric projects;

Knowledge activities ('MegaMind' seminars);

**Growth 6-18months)**

**Aim: Long-term growth**

Expand partner ecosystem;

Incubate value-adding projects;

Initiate funding for academic and research chairs;

Establish MOUs with HEI's and projects of similar intent;

**Accelerate (18months+)**

**Aim: Future Viability and Sustainability**

Integrated and multi-disciplinary curricula;

Sustainable funding model (endowment);

Innovation hubs at UKZN for ideation, business incubation and prototyping

# AfriHub Value










#COCREATEMYCITY DURBAN

UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

AfriHUB

**The Hub for the African City of the Future**

**Invites you to a Seminar**

**By**

**ABSA Stockbrokers**

**On**

# The Power of the Stockmarket

**SEMINAR DETAILS**

**DATE:** 02 March 2017
**TIME:** 10h00
**VENUE:** Lecture Room 1, GSB, Westville Campus

**RSVP Essential**

**RSVP to:** dlaminik@ukzn.ac.za
**By:** 27 February 2017

## WORKSHOP OVERVIEW

Income generation through smart investments lies at the heart of wealth creation and financial sustainability.

Many South Africans suffer from high indebtedness and lack of financial skills resulting in financial vulnerability.

The Power of the Stockmarket presents a unique opportunity to learn how the stock market works and how one should plan to invest in the stock market. It will cover investment strategies, risks and most importantly, the 7 rules of the stock market.

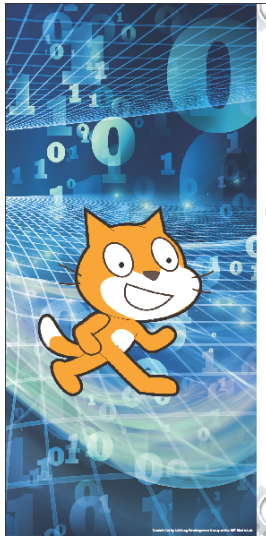
## ABOUT THE FACILITATORS

The Hub for the African City of the Future (AfriHub) is an initiative within the UKZN's School of Engineering. It's Mission is to facilitate multi-disciplinary engagement that will result in innovative and sustainable solutions for African problems.

Activities under the AfriHub include forging collaborative, strategic partnerships with a diverse range of stakeholders which can contribute to knowledge advancement on technology, business and development issues by hosting interactive knowledge forums.

ABSA Stockbrokers respresents one of the top banks in South Africa.

INSPIRING **GREATNESS**



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**The Hub for the African City of the Future**

Invites you to

# A Scratch Computer Coding Workshop

**DATE:**
Friday, 12 May 2017

**TIME:**
14h00-17h00

**VENUE:**
Civil Engineering LAN,
Howard College Campus, UKZN

**RSVP Essential**
RSVP to: dlaminik@ukzn.ac.za
by Tuesday, 9 May 2017

INSPIRING GREATNESS

WORKS

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to more than we ev

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non-profit CodeMak

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*Harvard Law studen
7yr old learners in
code. What's stopp*

ABOUT

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The Hub for the
(AfriHub) is an initia
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problems.

# SNAP @ ENGINEERING PHOTO Competition



**Terms and Conditions:**
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**Entry Information**
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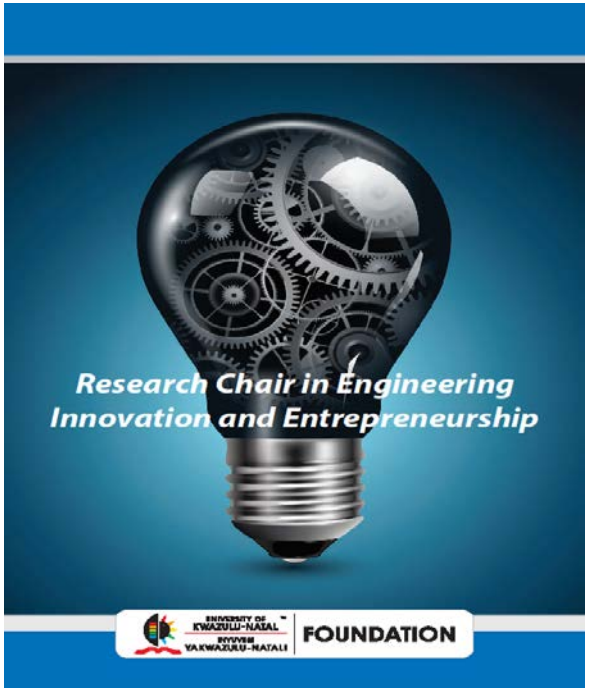
UNIVERSITY OF KWAZULU-NATAL
INYUVESI YAKWAZULU-NATALI

INSPIRING GREATNESS




# Hub for the African City of the Future (AfriHUB)

AfriHUB

Value creation that promotes intellectual, social and economic advancement lies at the heart of the Hub for the African City of the Future (AfriHub). Through AfriHub, the University of KwaZulu-Natal can play a critical role in this regard through refocusing educational curricula, multi-disciplinary collaboration, improving training and skills development, fostering an entrepreneurial culture and leveraging greater value from its intellectual assets.

## The Hub for the African City of the Future (AfriHub)

AfriHub is a strategic project under the UKZN's School of Engineering. The project pursues two overlapping objectives:

- **Catalytic:** To create value through innovative research and multi-disciplinary collaboration.
- **Transformative:** To align the teaching and educational outcomes with market and societal needs.

Activities under the Hub will include the following:

- **Multiple-Engagement with Industry Stakeholders:** Collaboration with industry partners will promote ideation, dialogue and collaboration which is essential for research to address complex social and technological challenges. Synergy across disciplines can result in better resource mobilisation.
- **Entrepreneurship Development:** Entrepreneurs drive economic growth. Hence AfriHub must promote entrepreneurship skills to prepare learners for globalization, increasing competition and dwindling resources.
- **Building the Knowledge Economy through Philanthropic Engagement:** Attracting financial resources to enhance the knowledge economy by funding workshops, projects, or Research Chairs, will form an integral part of the activities of the 'Hub'.
- **Community Outreach:** Key to the UKZN's social impact is community outreach. Progress is already underway through the CREATE programme between UKZN's Graduate School of Business & Leadership, School of Engineering and MIT. The aim is to capacitate SMME's in the KZN region.





University of KwaZulu-Natal

# Civil Support Fund

## #Knucs Cares!

### LEGACY OF EXCELLENCE

*We Inspire, We Educate, We Support, and We Care! This makes UKZN's Civil Engineering great!*

With a legacy that extends to over half a century and reaches all over the world, graduates of Civil Engineering at former University of Natal and currently University of KwaZulu-Natal, have blazed a trail of innovation, design and business successes across the globe.

To assure progression of this legacy, visionary thinkers within the discipline started the KwaZulu-Natal University Civil Support (KNUCS) Fund in 1980. The aim of the Fund was to grow teaching and research excellence by supporting scholarship and academic skills at the University.

**What KNUCS Does**

The KNUCS Fund ensures sustainability of UKZN's Civil Engineering by attracting funding and in kind support from corporates and individuals within the Civil Engineering, Construction and Consulting sectors. Disbursements are decided by a steering committee comprising the Dean of Engineering, the Head of the Civil Engineering programme, and key members from industry; the Chair of the KZN Branch of SAFCEC, the Chair of KZN Branch of CESA, and the Head: Engineering of the eThekwini Municipality (or nominee).

The Steering Committee meets at least once a year (or more frequently if necessary) to decide on fund disbursements. A quorum requires the presence of at least 3 out of the 5 members of which at least 2 must be from the industry partners. Operating rules may be changed by the steering committee should this be necessary.

**Supporting KNUCS benefits the University and Civil Engineering industry**

Budget reprioritisation in higher education, difficulties attracting young, innovative staff to academia and limited resources for innovative research, poses serious challenges to the viability and sustainability of UKZN's Civil Engineering.
Providing financial support to the KNUCS Fund will benefit the full value chain of Civil Engineering at UKZN sustaining excellence in graduates and research.

All donations when channelled through the UKZN Foundation, qualify for Section 18A Tax Exempt status and earn BBBEE scorecard points.

INSPIRING GREATNESS

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Date: 07 Apr 2017
Page: 11

# When outrage is simply not enough

RUDI KIMMIE

'IT WAS the best of times, it was the worst of times; it was the age of wisdom, it was the age of foolishness; it was the epoch of belief, it was the epoch of incredulity; it was the season of light, it was the season of darkness; it was the spring of hope, it was the winter

As a nation, we have entered our "winter of despair".

Hope was the dividend that sustained many South Africans after the demise of apartheid in 1994.

Following the peaceful transition to democracy, the birthing of our much-lauded constitution and Bill of Rights, across the world there was a collective

another lesson – hope doesn't feed, clothe or shelter you. That one cannot live on dreams alone, and these needed to be underpinned by tangible and inclusive transformation where the wealth of the country is shared by all who live in it, has become a berating historical lesson.

Hence the recent economic down-grade that sent a seismic shock to the

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in a business-as-usual way,
on the country's new-found
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ose due to demographically
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deployment not only spawned a new power elite, but also contributed to the negation of human values, giving rise to cronyism, crass consumerism which was driven by self-interest, power and greed.

Similar examples can be seen in the former Soviet Union and other countries that experienced drastic regime change.

**'We can't protest our way out of this mess'**

The outrage from various quarters, including the ruling ANC, at the recent ill-considered cabinet reshuffle without concern for the consequences, is justified. A sitting president reigns over a country and should govern in the best interest of the country. Governing is based on integrity, trust and delivery; about unlocking the value of the government to serve the best interest of the nation.

How do we get out of this mess?

Our polarised "us versus them" stance is not the solution, nor can we protest ourselves out of this mess. This will only harden the polarisation.

The answer lies in our constitution, which proclaims in its Preamble that "South Africa belongs to all who live in it, united in our diversity".

Inclusiveness is also underscored by comments from former finance minister Pravin Gordhan, who in his 2017 Budget speech stressed the need for inclusive economic growth; growth that could bring about tangible economic benefits to the approximately 40% of the population living in poverty.

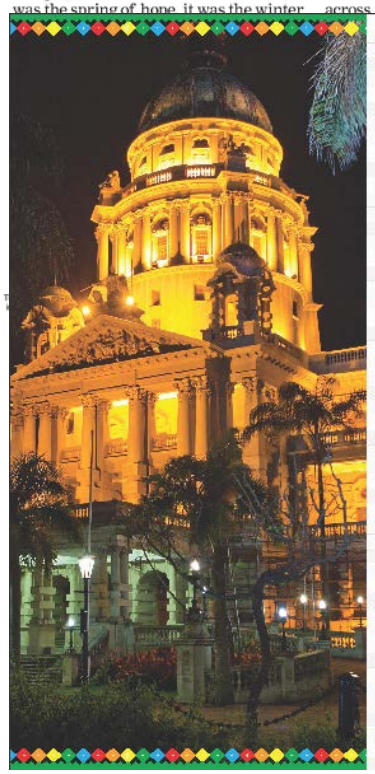
A proposed solution to the economic and political woes is an inclusive dialogue, one that seeks to transcend narrow self- or party interest and that embraces our common destiny, our interdependence on each other and that recognises the spirit of ubuntu, that nothing exists except in relation to everything else.

Our leaders need to realise that seeing the isolated parts of a situation from only one perspective such as ideology, blinds them to their actions and its effects on the broader social system. It fosters a stunted ability to reason and understand the outcomes of their actions.

Ordinary South Africans have shown tremendous resilience in the face of political dysfunction, high crime and failing service delivery.

In the same vein that politicians found one another during the Codesa talks, now is the time for authentic communication, for deep listening and empathy. The question is: can our political leaders rise to the challenge?

Rudi Kimmie is UKZN's manager of the Hub for the African City of the Future and an associate of the Leadership Dialogue. He writes in his personal capacity.

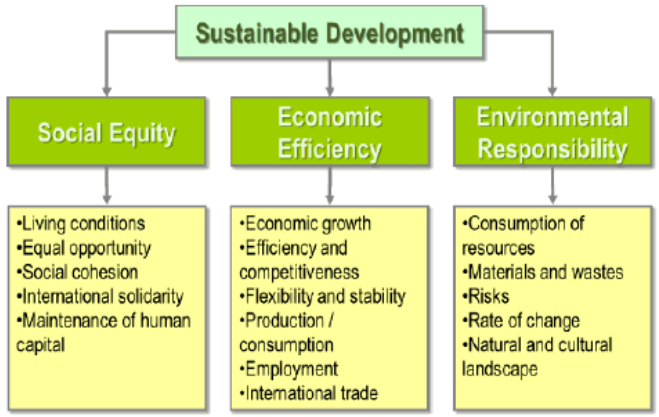






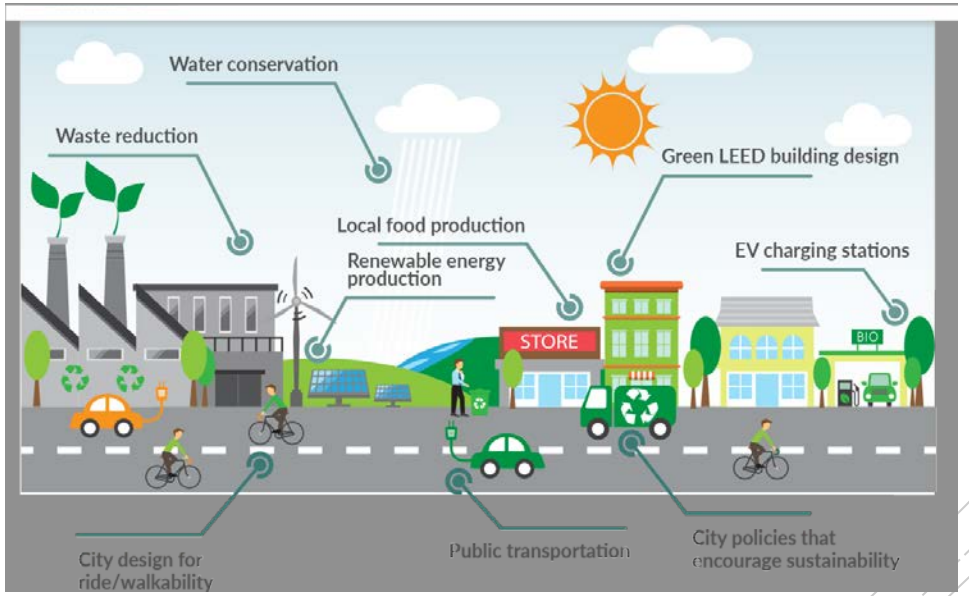

AfriHUB


Environment
Bearable
Viable
Sustainable
Social
Equitable
Economic


Sustainable Development
Social Equity
Economic Efficiency
Environmental Responsibility
•Living conditions
•Equal opportunity
•Social cohesion
•International solidarity
•Maintenance of human capital
•Economic growth
•Efficiency and competitiveness
•Flexibility and stability
•Production / consumption
•Employment
•International trade
•Consumption of resources
•Materials and wastes
•Risks
•Rate of change
•Natural and cultural landscape






Water conservation
Waste reduction
Green LEED building design
Local food production
Renewable energy production
EV charging stations
STORE
BIO
City design for ride/walkability
Public transportation
City policies that encourage sustainability

# Potential ‘Road Blocks’ to Navigate




**Fear**

**Cynicism**

**Judgement**

Embedded thinking;
Conventional (‘its always been done this way’);
Fear of the unknown;
Change is too much hard work.

# Growing Forward; Sustainability




Mobilise resources



Galvanise support from key stakeholders



Drive the Vision

AfriHUB

# End

