





Mission-Oriented Innovation: A local perspective

18th PUBLIC SECTOR INNOVATION CONFERENCE Prof Geci.Karuri-Sebina@wits.ac.za 21 August 2024



Mission-oriented innovation? (Let's be honest guys we can't do this)



Overview

- 1. Why we can't do it in South Africa
- 2. Why we must do it, still
- 3. How might we get there



MOI: Why we can't do it in South Africa

• We've seen this before – Apartheid Era nuclear technology and space programs; DST's Grand Challenges; IDC and TIA sector challenges; the Renewable Energy Independent Power Producer Procurement Program; etc..





science & innovation Science and Innovation REPUBLIC OF SOUTH AFRICA



Live or Die

South Africa's innovation system

EXAMPLES OF WHAT THESE FACTORS CAN IMPACT AT DIFFERENT LEVELS:

	IMINOT AT DITTERENT LE VELS.		
FACTOR	Individual/team	Organisational	System(s)
Barriers and drivers	Lack of skills and capacity Funding Personal traits	Lack of incentives Bureaucracy, management, leadership Sharing of knowledge	Lack of flexibility in laws and policy Structural constraints Political factors Social and technological factors Theoretical and policy failure
Risk, un- certainty and shocks	Consequences of failure (negative performance appraisal) Unintended consequences such as the exclusion of certain individuals	Culture of risk avoidance (negative consequence management practices) Job losses	Negative consequences such as dependency or unemployment Wicked problems
Agency	Ability and support to navigate the structure of social relations underlying processes	Ability and support to navigate inter- institutional dynamics	Ability and support to navigate policy and legislative dynamics

Why Innovations Live or Die South Africa's innovation system



or YOU MOI: Why we_^can't do it in South Africa

APPROPRIATENESS?

- **Political pressures:** prioritize short-term electoral gains over longterm investments in innovation.
- **Policy inconsistency:** unstable environment for long-term projects.
- Ineffective evaluation: failure to learn & termination of promising MOI projects.
- **Social unrest:** disrupts economic activities and hinders innovation.



CAPABILITY?

- Financial constraints: budgetary pressures, and large-scale MOI initiatives require substantial investments.
- Human capital limitations: shortage of skilled personnel, particularly in STEM
- Overreliance on external expertise: reliance on foreign consultants or technology hinders the development of local capabilities.
- Dependency on global markets: fluctuations in global markets impacts the success of MOI initiatives.

PERFORMANCE?

- **Bureaucracy:** Complex bureaucratic processes slow down decision-making and implementation of projects.
- **Corruption:** diverts resources and undermines the effectiveness of MOI initiatives.
- Weak governance: hampers collaboration and coordination among stakeholders.
- Overwhelmed with multiple priorities and constraints: Energy crisis, infrastructure deficits, and complex socio-economic challenges

MOI: Why we can't do it in South Africa

• In Summary: MOI has no chance here.





Why we must do it, still

 "We choose to go to the moon in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are willing to accept, one we are unwilling to postpone, and one which we intend to win."

— John F. Kennedy

Why we must do it, still

- More urgently & impactfully address our serious challenges: SA faces complex problems that require innovative solutions (in health, water, energy, etc.). MOI can mobilise resources and expertise to tackle these challenges head-on.
- We need to secure livelihoods and economic growth: By focusing on solving societal problems, MOI can stimulate economic growth and create new job opportunities, especially in emerging sectors.
- Inclusive Innovation: MOI can promote inclusive growth by ensuring that innovation benefits all segments of society, not just the privileged few.
- **Global polycrises and opportunities:** SA can position itself as a global leader in addressing specific challenges, attracting investment and talent.
- **Public-Private Partnerships**: MOI fosters new collaboration spaces between government, academia, and industry, leading to more effective solutions.



How might we get there

FIX STRUCTURE: Do the right things

- Right mission(s)
- Right actors & partnering
- Appropriate system design
- Enabling ecosystems
- Leverage tech
- Pilot and Scale

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- Effective outcomes
- Dynamic value-led MERL

CHANGE: <u>Do things differently</u>

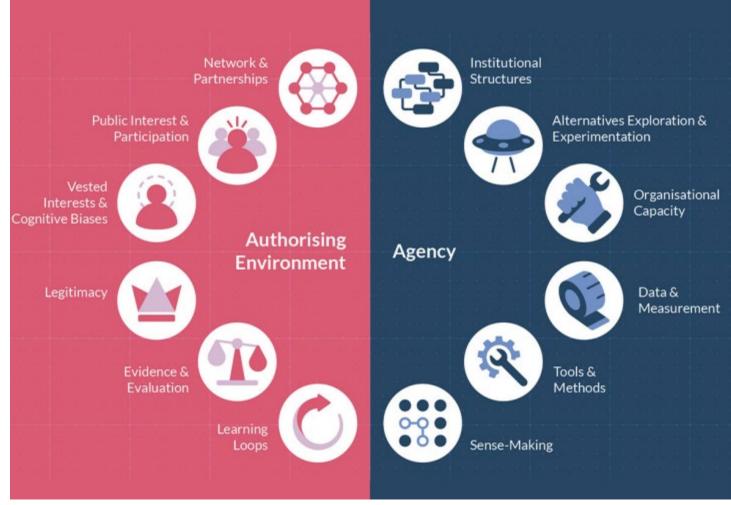
e.g.

- 1. Anticipatory Governance
- 2. Digital Transformation
- 3. Creative procurement



Anticipatory Governance

OECD-OPSI, 2023



See UN Summit of the Future and CPSI active foresight partnerships



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Mode-I Linear	Mode-II Evolutionary	Mode-III Co-evolutionary
'CLEVER': complex	'SMART': emergent complexity	'WISE': deeper complexity
Elite/experts with top- down programme	Elite/experts with open enterprise	Participative co-learning & co-production
Technical & functional analysis	Multi-functional analys	Multi-dimension, multi- valent, analysis- synthesis
Problem-solving foresight: for technical innovation	Opportunity-seeking entrepreneurial innovation	Agenda setting foresight & transformative innovation
Tangible system mapping	Systems of incentives, competition, enterprise	Cognitive capital & connexus mapping
Tangible trends / scenarios	Evolutionary trends/scenarios	Alternative futures & synergistic potential
Specific problem-solving	Innovation & problem insight	Societal co-design & co- innovation
Specific	Enterprise strategy & road-mapping	Societal transformation pathways
	Linear 'CLEVER': complex Elite/experts with top- down programme Technical & functional analysis Problem-solving foresight: for technical innovation Tangible system mapping Tangible trends / scenarios Specific problem-solving	LinearEvolutionary'CLEVER': complex'SMART': emergent complexityElite/experts with top- down programmeElite/experts with open enterpriseTechnical & functional analysisMulti-functional analysisProblem-solving foresight: for technical innovationOpportunity-seeking entrepreneurial innovationTangible system mappingSystems of incentives, competition, enterpriseTangible trends / scenariosEvolutionary trends/scenariosSpecific problem-solving foresight:Innovation & problem insight

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Ravetz (2020) Deeper City

Digital Transformation



- Transform why we do things
- Transform what we do

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COMMUNITY, SELF, TECHNOLOGY

CIVIC TECH

INNOVATION

- Transform how we do things
- Transform who and what we do things with



28TH-31ST OCT '24

Tshimologong Digital Innovation Precinct, Johannesburg

Citizen-

Driven

Development

happening

next door!

Dare to look #UnderTheHood



UNIVERSITY OF THE WITWATERSRAND JOHANNESBURG

Creative procurement

Creative Procurement Working Group by CSP / World Bank coming soon

- "Creative procurement refers to new ideas and ways of implementing procurement. It seeks to promote procurement as a strategic policy instrument that can be tailored to support the different objectives and circumstances of municipal government. It is an applied and creative practice, distinct from traditional procurement, which is seen as an administrative compliance procedure for the contracting of goods and services."
- Creative Procurement Legislative and Regulatory Review Note (2023) identified that "the legislative and regulatory space exists to try innovative approaches to procurement, however this is in the context of **limited** capacity and a lack of institutional enablement to do so"
- "Imagine how municipal SCM policies could strengthen procurement as an applied creative discipline to support cities' development goals."

(Creative Public Procurement presentation, National Treasury, 2023)





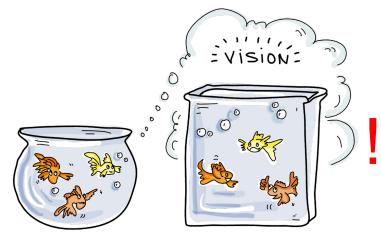
3 shifts for the future:

HOW DO WE THINK NEW THINGS?

:imagine:

new THINKING for futures

- Creating new forms, reforming old paradigms, and (re)inventing our futures
- Challenging assumptions and conventional, hegemonic "wisdoms"
- Innovation and creative problem-solving
- Local, public engagement and visioning
- Empathy and pluralist perspectives



Reproducing futures

Radical inclusion: creating spaces and systems that actively embrace and value the participation and contributions of people from all backgrounds, identities and perspectives





3 shifts for the future: HOW DO WE *WORK WITH PEOPLE IN NEW WAYS*? **include:**

new Processes for futures

Dismantle systemic barriers and biases that exclude marginalised groups and perpetuate inequalities:

- Power imbalances and structural inequalities
- Invisibilities, voicelessness
- Safe and welcome spaces

- Intersectionality of identities, experiences
- Systemic barriers and unlearning biases
- "Invited" vs. "invented" spaces

Sustaining old power structures

Transversal governance transcends hierarchical boundaries

- Horizontal cooperation and collaboration among different actors
- Participatory decision-making processes
- Systemic approach to complex challenges
- Adaptive, flexible & iterative approaches to policy design and implementation
- Integration of policies, strategies, actions across various sectors and levels
- Importance of multilevel governance
- Promotes knowledge exchange, learning and capacity building



3 shifts for the future:

HOW DO WE ACTUALLY ENABLE NEW WAYS?

:institutionalise:

new Systems & Environments for futures



3 shifts for the future:

HOW DO WE THINK NEW THINGS? :imagine



HOW DO WE WORK WITH PEOPLE IN NËW WAYS? :include



HOW DO WE ACTUALLY ENABLE NEW WAYS? :institutionalise

Let's talk... Questions? Ideas?



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