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EDHE LEKGOTLA 2021

UNECA Research

*United Nations Economic Commission for Africa Study on
Advancing Entrepreneurial Universities in Africa: South African
Findings*

SHOWCASE SESSION 1B

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The Project

What? A survey of universities, focused on entrepreneurship

Why? To develop a picture of the extent to which entrepreneurship is promoted across universities

How? A survey instrument followed by one-on-one interviews

Who? Phase 1: Three universities

Phase 2: The additional 23 public universities (2nd semester 2021)



Literature Review

Literature Review

- Towards a **definition** of Entrepreneurial Universities
- Existing **frameworks**
- **Context in Africa** as continent
- Other key **considerations**

Literature Review (cont.)....towards a definition

- The entrepreneurial university is an institution that creates an environment, within which the **development of entrepreneurial mindsets and behaviours are embedded, encouraged, supported, incentivised and rewarded** (Hannon, 2013).
- Regional development studies indicate that some universities position themselves as entrepreneurial to contribute to **positive contextual impact** (Gordon, Hamilton, & Jack, 2012).
- “Universities should **use their vast intellectual and financial resources to confront global challenges** such as climate change, extreme poverty, childhood diseases, and an impending worldwide shortage of clean water” (Thorp & Goldstein, 2017).
- Entrepreneurial universities have the **ability to innovate, recognise and create opportunities**, take risks and respond to challenges. It sells its services in the knowledge industry and is a **natural incubator that supports its academics, technicians and students to create new ventures** (Kirb, 2020).

Literature Review (cont.)....towards a definition

- Etzkowitz the man credited with the term “entrepreneurial universities”, proposes that “universities should put their knowledge to teaching students, conducting research and taking a **more active role in society with different actors and companies.**”
- Second “**academic revolution**”. He further asserts that entrepreneurial universities are **transforming the traditional university model, “by encouraging interaction among university, industry, government, which is the key to improving the conditions for innovation in a knowledge-based society”**
(Africa Renewal, 2017).

Literature Review (cont.).....towards a definition

- Inclusion of **entrepreneurial education in all disciplines** by, for example, **creating on-the-job training and learning for students**; establishing incubation centres; **creating spaces for university, industry and government engagement**; the cross-pollination of knowledge; and the recognition of prior learning. Universities are called on to recognise and **credit industry learning and training** in their formal qualifications. (Amadi-Echendu, Phillips, Chodokufa, and Visser, 2016).

Literature Review (contd..) frameworks

- Strategy
- Leadership
- Agency
- Shifts in paradigm and perspective
- Transdisciplinary
- Pedagogy
- Indigenous knowledge
- Inclusive

Literature Review (contd..) frameworks

BRAP Framework

Basic Human Capacity

People with interest in innovation and entrepreneurship, including students, teaching and support personnel, mentors as well as external partners.

Resources

Infrastructure, funding, creative spaces and equipment.

Agile and Quality Curriculum

Nurtured skills for competitiveness and innovation and dedicated time for creative thinking, learning and self-discovery

Planning

Institutional strategies with clear, impactful and measurable outcomes that are backed up by relevant resources

(Moyo, 2019)

Literature Review (cont.).....

- In promoting and supporting entrepreneurship, universities themselves **need to be entrepreneurial and innovative.**
- These uncharted waters for need to be navigated through **discussion, experimentation, support and guidance in this endeavour.**
- **Need for public policy** has an important role to play in supporting this transformational aspect of universities.
- The **limited understanding** of what it takes to build such universities, **ranging** from leadership, institutional culture, strategy, systems, capacity, integration, alignment, to interaction with external contexts to assist universities in their goal of becoming engaged, responsive and entrepreneurial.

Jack, & Lockett, [2016](#))

(Larty,

Literature Review (contd..)

- They **must risk** being different, to be **more responsive** to the current African realities. There is also a felt need for universities to introduce **innovative courses relevant** to the African context. Creating entrepreneurial universities is one of the most **powerful ways of transforming national universities in Africa**. Public universities should be considered a **national resource contributing to resolving societal issues**, or else Africa is likely to remain the poorest continent. Universities are still challenged to be **more inclusive**. While education is complex and cannot be seen only from a monetary aspect, there is a need for African universities to seek **new identities** (Nafukho and Wawire n.d.).
- The African policy environment is still not robust enough to protect African innovations and inventions (ACEEU, n.d).

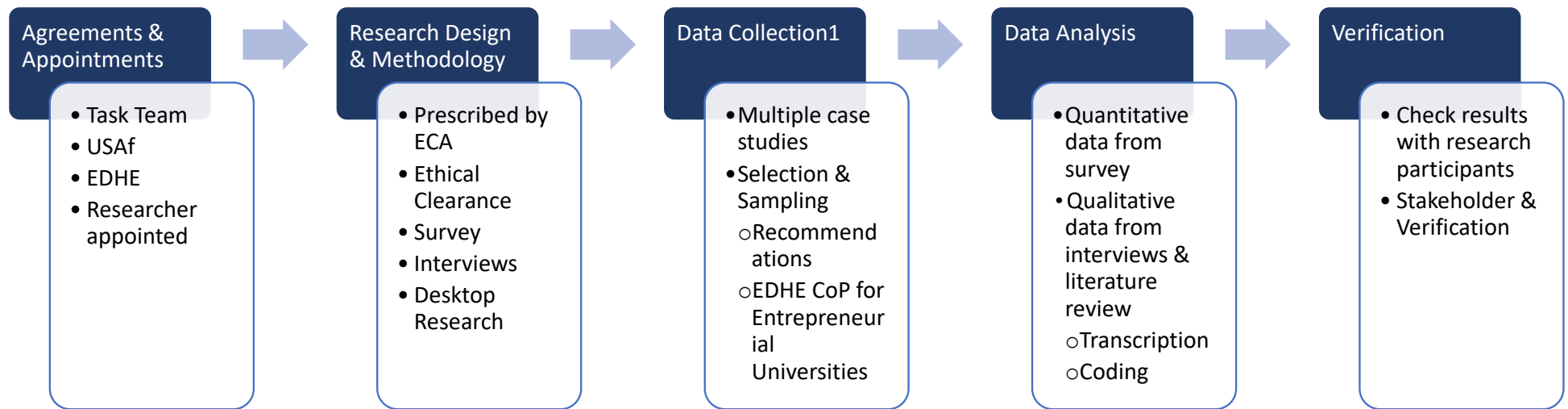


Research Methodology

Research Methodology

- Mixed-methods approach (quantitative and qualitative).
- Research tools used included a survey, semi-structured interviews, supplemented by information from university websites.
- The review included a desktop review of entrepreneurial university frameworks, issues, challenges and emerging practices.
- A Task Team was established from members of the Community of Practice (CoP) on Entrepreneurial Universities who guided sample selection, framing and analysis of the report.
- Steering Committee

The Research Process



Sample

Institution	#s	M	F	Positions
Durban University of Technology	5	0	5	2 x DVCs; Director of Department; 2 x Entrepreneurial Desks
Nelson Mandela University	6	3	3	2 x DVCs; Director Research; Dean; Director of Strategic Resources, Entrepreneurship Specialist
Stellenbosch University	5	3	2	DVC; CEO: Incubator; Professor in Bio-sciences; Research Manager; CEO of a spin-off company

Limitations and Challenges



Ethical clearance



Survey fatigue



Diary challenges



Cannot generalise from small sample

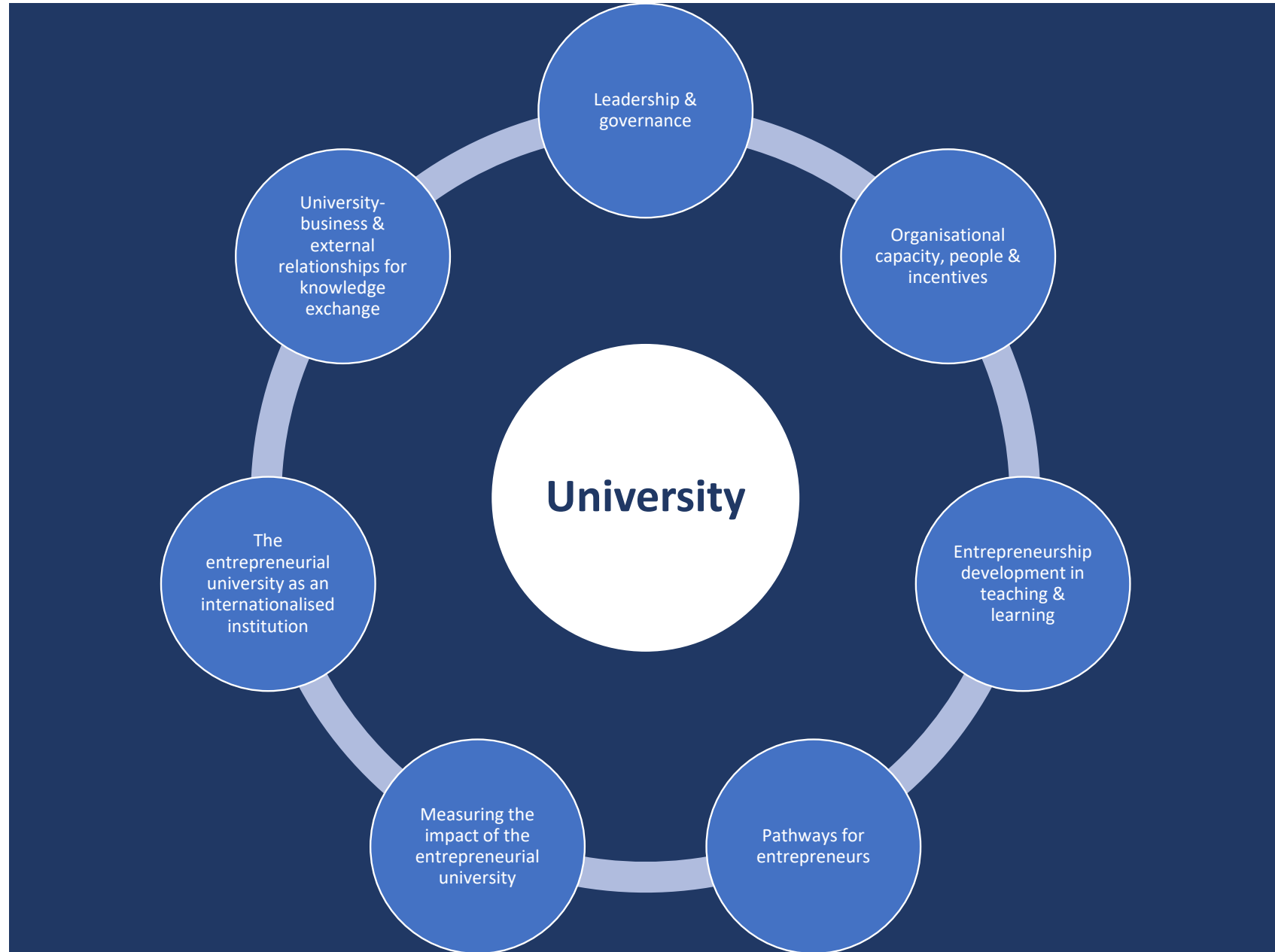


Not a full picture

No single person has the full picture

Impossible to get a complete picture within limitations of time and budget

HEInnovate



1. Leadership and Governance

This section explores the factors which relate to the leadership and governance of a university. Many universities include the words “enterprise” and “entrepreneurship” in their mission statement but this needs to be more than a reference.

2. Organisational Capacity, People and Incentives

Universities can be constrained by their own organizational structures and approaches, making it more difficult to carry out the types of entrepreneurial activities which support their strategic objectives. This section highlights some of the key areas a university may look at if it wishes to minimize the organizational constraints to fulfilling its entrepreneurial agenda.

3. Entrepreneurial Development in Teaching and Learning

Universities are expanding their entrepreneurship and entrepreneurial education offer to the institution as a whole, including all staff and students. This section focuses on a number of areas in which entrepreneurial development can take place.

4. Pathways for entrepreneurs

This section looks at the university support for “entrepreneurship” in their career development or enterprising individuals on their pathway to becoming an entrepreneur

5. University business/external relationships for knowledge exchange

Active involvement of a range of stakeholders contribute to creating value for the university and society. Building and sustaining relationships with key collaborators is essential in achieving the full potential of a university, in entrepreneurship research, teaching and in other third mission activities.

6. The Entrepreneurial University as an International Institution

An international perspective at all levels has been identified as one of the characteristics of an Entrepreneurial university. As internationalization is increasingly integrated into strategic processes, it becomes essential for universities to be able to make informed decisions on institutional direction, as well as, assess and enhance performance according to different objectives over a wide range of international activities. It is not possible for a university to be entrepreneurial without being international, but the university can be international without being entrepreneurial.

7. Measuring the impact of the Entrepreneurial University

There are many different types of impact a university may seek ranging from the local to the global. The impacts affect internal stakeholders and also external stakeholders. Impact measurement relating to graduate entrepreneurship, retaining talent, local economic development, or the impacts of the broader entrepreneurial strategy is the focus here.

8. Planning

Areas included in the mission and strategy with a published implementation plan:

- Entrepreneurship learning and teaching
- Knowledge exchange
- Tech transfer/commercialization of research outputs
- Business start-ups/spin-offs
- Incubation
- Internationalisation



Findings

Entrepreneurship Imperative	DUT	NMU	SU
Ownership and accountability of entrepreneurship	<p>DVC: Research, Innovation and Engagement</p> <p>Strategy and Mission</p> <p>Strong culture and support for students</p>	<p>Four departments: Strategic Resource Mobilisation and Advancement, Innovolve (for commercialisation) and Student Affairs with Teaching and Learning.</p>	<p>DVC: Research, Innovation and Postgraduate Studies</p> <p>Strong culture of commercialisation of IP</p>
Entrepreneurship policies for students	<p>Student entrepreneurship policy across all faculties that stipulates that all undergraduate students should take a compulsory course.</p> <p>Maps out student entrepreneurship development support and infrastructure</p>	<p>Student entrepreneurship policy for student entrepreneurs and the required resources, and allocation thereof infrastructure.</p> <p>Seen as a vocational skill.</p> <p>SEDA</p>	<p>No specific policy in place</p> <p>Course in some faculties</p> <p>Holiday programme</p> <p>Competitions</p>
Graduate qualities	<p>Adaptive graduates for an evolving world of work who can make a difference in their personal lives and the world</p>	<p>Graduates with skills, literacies and competencies, responsive to the current world of work and who can make a difference in the world</p>	<p>Graduates with businesses who can make a difference in the world</p>

Entrepreneurship Imperative	DUT	NMU	SU
Intellectual property	Technology transfer, patent and incubation support for academics and all students	Technology transfer, patent and incubation support for academics and all students	Technology transfer, patent and incubation support for academics and postgraduates
Staff support	Capacity building for entrepreneurship activities, teaching and learning, and opportunities for consulting	Capacity building for entrepreneurship activities and teaching and learning, and opportunities for consulting	Capacity building and funding available for patent registration and commercialization
Community focus	Community engagement as part of the teaching and learning experience and process	Community engagement as part of the teaching and learning experience and process	Community support as part of social responsibility outreach
Funding for student entrepreneurship support and activities	University plus partners	Strategic Resource Mobilization and Advancement Office (SRMA)	Competitions and Social Impact fund
Incentives for academics	Income incentives for consulting. No incentives for promoting entrepreneurship activities	Income incentives for consulting. No incentives for promoting entrepreneurship activities	Incentives for patent registration and commercialization efforts

Entrepreneurship Imperative	DUT	NMU	SU
Definition of an entrepreneurial university	No single definition or uniform understanding	No single definition or uniform understanding	No single definition or uniform understanding
Support /Infrastructure	DUT Innovation Hubs, Centre for Social Innovation, Centre for Social Entrepreneurship and Rapid Incubator, Department of Entrepreneurship Studies, Coordinating centre for entrepreneurship, Technology Transfer and Innovation Unit, Desks for student support, Coordinators in all faculties	Madibaz Hub, Propella, Innovolve, Maker Space	LaunchLab, Innovus, Deans as champions, Hubs in all faculties, Innovation committees in selected departments
Co-ordination	Co-ordination Centre	No clear coordination mechanism in place	No clear coordination mechanism in place

Entrepreneurship Imperative	DUT	NMU	SU
Partnerships	Local Private/Public	Universities International Private/Public	African Union Development Agency Fraunhofer International
Strategy	Envision2030	Vision 2030	Vision 2040/ Strategic Framework 2019-2024
Challenges	Implementation imperatives Measurement Incentives Capacity Building Funding Hierarchy Bureaucracy	Co-ordination, Consolidation and integration Capacity Lack of infrastructure Measurement Lack of sustainable funding Bureaucracy	Incentives Teaching and Learning Capacity Courses Need for more cross disciplinary activities
Other	Survey Target Post graduate Research Audit	Provincial Initiatives Commercial initiatives	Cape Higher Education Consortium (CHEC)

Entrepreneurship Imperative	DUT	NMU	SU
Survey Results	<p>High scores on majority of questions: Between 80-100% score</p> <p>Lower scores related to entrepreneurial activities,</p> <p>All lecturers taking an entrepreneurial approach to teaching, and</p> <p>Additional funds for staff undertaking entrepreneurial activities</p>	<p>Scored very high on: provides critical support to communities, commitment from highest levels,</p> <p>knowledge exchange with industry, society and the public sector,</p> <p>international involvement and guest lecturers and researchers</p> <p>Lower scores on: regular stock of entrepreneurial activities, entrepreneurship training for all staff</p>	<p>Higher scores: driving entrepreneurship in the wider region,</p> <p>provides critical support to communities, commitment from</p> <p>highest levels, entrepreneurial support and knowledge exchange with industry, society and the public sector</p> <p>Lower scores on: involvement in entrepreneurial activities is not included in key performance areas,</p> <p>Staff take an entrepreneurial approach to teaching and learning</p>

Critical Success Factors

- Understanding of the capacity requirements
- Sustainable resources
- Internal and external ecosystems
- Enabling a culture for innovation and entrepreneurship
- Incentives
- Enabling an adaptive university culture for change
- Measurement framework
- access to private and public sector partnerships

Critical Success Factors (cont.)

- Teaching and Learning Imperatives
- Policy
- The role of EDHE
- Relevant Research and Knowledge
- Trans and Multi-disciplinary initiatives
- Need for best practice and knowledge sharing
- Consolidation, Integration and Co-ordination



Recommendations

Recommendations

- Audit and Baseline of Entrepreneurship in Universities
- Monitoring and Measurement Framework
- External Ecosystems and Partnerships
- Research Repository
- Regular Discussion Forums
- National Policy for University Entrepreneurship Development
- Capacity and Skills
- Incentives
- Funding and Resources
- Engagement with universities and structures in Africa



SA Higher Education Context

South African Context

University Internal factors

- Covid
- Fees Must Fall
- Inequality
- Poverty of Students
- Other transformational imperatives in HE

External Factors

- Socio economic climate
- Covid
- Youth/graduates
- 21st Century global economy
- VUCA context
- Reconstruction and recovery Imperatives



Thank you