South Africa University innovation ecosystem mapping

Evidence gathering to inform research commercialisation capacity strengthening

Sarah Allison, PhD

Alexandra Bush, PhD

Irene Dal Poz

Confidential

Disclaimer

This document is an output from the project **210216 British Council ecosystem mapping** on terms specifically limiting Oxentia's liability. Our conclusions are the result of our professional judgment, based upon the material and information provided to us by the client and others. Use of this final presentation report summary by any third party for whatever purpose should not, and does not, absolve such third party from using due diligence in verifying the meeting summary's contents.

Any use which a third party makes of this document, or any reliance on it, or decisions to be made based on it, are the responsibility of such third party. Oxentia accepts no duty of care or liability of any kind whatsoever to any such third party and no responsibility for damages, if any, suffered by any third party as a result of decisions made, or not made, or actions taken or not taken, based on this document.

This report is for limited circulation within **Universities' of South Africa and the British Council** and its stakeholders, for the purposes of the above project. No circulation of this document can be made either in full or in part to any other parties, without prior consent.

Background to the project

Innovation ecosystem mapping

Purpose

- Understand the current barriers and enablers of the 26 South Africa university innovation ecosystems.

- Support research and innovation capacity strengthening across all public Higher Education Institutions (HEI's) in South Africa

Outputs

- Inform the creation of the National Policy Framework on Entrepreneurship Development in South African Higher Education

- Provide USAf and the British Council with insights and evidence for future collaborations in cross cutting themes of research, innovation, entrepreneurship, and commercialisation in line with the RCS framework

"It's not enough to ask what universities are good at – we must also ask what universities are good for!" [1]

Professor Chris Brink

1. National University Entrepreneurship Ecosystem baseline report, February 2020

BRITISH COUNCIL

UNIVERSITIES SOUTH AFRICA

higher education & training
Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

ucdp
UNIVERSITY CAPACITY DEVELOPMENT PROGRAMME

EDHE
ENTREPRENEURSHIP DEVELOPMENT IN HIGHER EDUCATION

Introduction
Impact generation through commercialisation of academic research in South Africa

An opportunity for, and pathway to, economic growth in South Africa

"....critical for introducing new products into the market....." [2]

Using research outputs for societal benefit

2. South Africa's National Development Plan (2030)

Innovation ecosystem mapping: project overview

OXENTIA

10th Dec 2021
Survey sent out

26th Jan 2022
Survey close

Survey data analysis

31 Jan – 4 Feb 2022
5 focus groups

Focus group feedback analysis

16 & 17 Feb 2022
2-day workshop

Workshop output analysis

March 2022
Final report & recommendations

Survey

Focus groups

Workshop

Innovation ecosystem questions
- Overall satisfaction with research commercialisation at their university
- Ecosystem element diagnostic
- Incentives, awareness and skills

Innovation Ecosystem gaps explored
- Innovation ecosystem barriers and enablers
- Survey results summary
- Themes and solutions to enable more impact from research through commercialisation

Innovation ecosystems and academic entrepreneurship
- Maximising impact through research commercialisation
- Bridging the research, innovation and entrepreneurship divide
- Sharing good practice, approaches and strategy

BRITISH COUNCIL

UNIVERSITIES SOUTH AFRICA

higher education & training
Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

ucdp
UNIVERSITY CAPACITY
DEVELOPMENT PROGRAMME

EDHE
ENTREPRENEURSHIP DEVELOPMENT
IN HIGHER EDUCATION

© Oxentia 2022

Innovation ecosystem mapping: project overview

Survey

- 28 respondents (19 universities)

- 14% of respondents were academic researchers, the remainder technology transfer managers or innovation directors

- 60% indicated that their university supported social sciences, arts and humanities (SSHA) commercialisation

- 89% indicated support for science, technology, engineering and maths commercialisation

- Most felt neutral or unsatisfied with the economic and social impact of academic research on the wider community

Focus groups

- Interactive online sessions with jamboards

- 5 focus groups, 1.5 hrs each

- 3 - 9 participants per group

- Universities grouped by type
  - Universities of technology
  - Newer and comprehensive
  - Research universities (large)
  - Research universities (small)
  - Rural-based universities

Feedback to inform the workshop

We asked:

What are you interested to learn more about and discuss at the workshop?

- Social science, arts and humanities commercialisation; Socially impactful projects and how to move these forwards

- How to move innovation projects past the prototype and feasibility stage; Where and how to obtain funding to do this and/or form the most beneficial strategic partnerships

- Types of impact through research commercialisation

- Industry partnerships and how to get these going

Innovation ecosystem mapping

Survey and focus group results

Existing drivers of research commercialisation

- Increasing numbers of researchers interested in extending the impact of their research through commercialisation

- Enthusiasm and motivation to drive innovations forwards

- Government funding and support

- Continued sharing of good practice between universities

- Emerging awareness and drive to embrace commercialisation of social sciences, arts and humanities including generating impact from traditional knowledge

Opportunities to increase impact

Building partnerships with industry

A need to form more relationships, connections and partnerships with industry and non-governmental organisations

- Too few industry links
- Difficulty forming relationships
- Lack of platforms to access industry

Funding

More funding needed to support early-stage, pre-seed innovations

- Difficulty accessing funding
- Uneven distribution of funds across the 26 universities in South Africa

Culture and incentives

Culture and incentives needed to support, motivate and encourage research

- Lack rewards and recognition for academic researchers to commercialise early-stage research
- More incentives needed to encourage industry-university partnerships

Innovation ecosystem mapping: Workshop feedback

OXENTIA

- Aimed to provide participants with insights into good practices, approaches, and strategies to translate research into meaningful and impactful outputs.

- The workshop was carefully designed, based on our understanding from wider literature and expertise within the innovation sphere, survey and focus group findings, to support the South African higher education sector's ambition to bridge the research, innovation, and entrepreneurship divide.

Excellent workshop. Well thought through and a nice balance of information packed sessions and case studies. Well done EDHE and what a wonderful kick off to 2022. Indeed 'Let's move to Market'"

This type of forum should be devolved to individual university level as well. Can take the form of 'townhall meetings' or 'Jam' sessions in industry eg IBM jam sessions to increase collaboration across different lines of expertise or product /service groups"

BRITISH COUNCIL

UNIVERSITIES SOUTH AFRICA

higher education & training
Department:
Higher Education and Training
REPUBLIC OF SOUTH AFRICA

ucdp
UNIVERSITY CAPACITY DEVELOPMENT PROGRAMME

EDHE
ENTREPRENEURSHIP DEVELOPMENT IN HIGHER EDUCATION

Innovation ecosystem mapping

Recommendations to strengthen research commercialisation capacity and ensure sustainability

Recommendations to strengthen research commercialisation capacity and ensure sustainability

OXENTIA

Increasing incentives for research commercialisation

- Recognition and rewards for academic researchers to commercialise their research, are lacking
- A need for incentives to encourage university-industry partnerships

We recommend:

Dissemination of the findings of the survey, focus groups and workshop to provide individual universities with examples of incentives

Additional funding

- Not enough funding
- Unequal distribution of funding amongst universities
- Need for strategic targeting of funds towards certain priority application areas

We recommend:

A review of government and non-governmental funding to identify areas of need

Metrics: measuring impact from research commercialisation

Metrics to measure and assess impact from research unclear

Importance to recognise all forms of impact generation

We recommend:

Ensure key stakeholders are aware of the findings of this project and other key developments, to achieve a common understanding of metrics and 'what good looks like'

BRITISH COUNCIL   UNIVERSITIES SOUTH AFRICA   higher education & training — Department: Higher Education and Training REPUBLIC OF SOUTH AFRICA   ucdp UNIVERSITY CAPACITY DEVELOPMENT PROGRAMME   EDHE ENTREPRENEURSHIP DEVELOPMENT IN HIGHER EDUCATION

Recommendations to strengthen research commercialisation capacity and ensure sustainability

OXENTIA

Build on each university's strengths

There is significant variation in research commercialisation capacity across South Africa

Need an individualised approach

Are there opportunities for inter-university partnerships of mutual benefit?

We recommend:

Support each individual university to carry out a review of their current strengths and areas of need

Further support for SSHA

Stimulate more widespread social sciences, arts and humanities (and local knowledge) research commercialisation

We recommend:

A programme of research commercialisation training as part of a wider capacity strengthening programme

Creation of a community and platform to support SSHA commercialisation

Research commercialisation culture strengthening

Cultivate a culture of research commercialisation, originating from the senior university stakeholders, at all of the 26 universities in South Africa

We recommend:

Bring together academic and offices of technology transfer (OTT) communities

- Networking
- Addressing common challenges

BRITISH COUNCIL UNIVERSITIES SOUTH AFRICA higher education & training — Department: Higher Education and Training REPUBLIC OF SOUTH AFRICA ucdp UNIVERSITY CAPACITY DEVELOPMENT PROGRAMME EDHE ENTREPRENEURSHIP DEVELOPMENT IN HIGHER EDUCATION

Sarah Allison

Sarah.Allison@oxentia.com

Alexandra Bush

Alexandra.bush@oxentia.com

Irene Dal Poz

Irenedalpoz@oxentia.com

Oxford's Global
Innovation Consultancy

OXENTIA