Stakeholder Engagement

DRUSSA Benchmarking Conference
Bagatelle. Mauritius
26 April 2016

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Stakeholder

‘A PERSON OR ORGANISATION WHO HAS SOMETHING TO GAIN OR LOSE AS A RESULT OF THE OUTCOMES OF A PROJECT, PROGRAMME OR PROCESS.’

SOURCE: HOVLAND, INGIE ‘SUCCESSFUL COMMUNICATION: A TOOLKIT FOR RESEARCHERS AND CIVIL SOCIETY ORGANISATIONS’, P. 8, 2005’
CPUT CONTEXT
TIMELINE : RESEARCH UPTAKE PROGRAMME

2008+

2011

2012

2013

2015+

2015:
- CPUT Research
Uptake: Strategy,
Tactics and
Implementation Plan
crafted - adopted by
Senate in Q1 2016
- Exec Management
mandates DVC to
undertake stakeholder
mapping and develop
strategy
The status quo cannot prevail

• Over recent years the parameters related to the practice of research amongst HEIs has widened.

• The National Development Plan of South Africa is critical of the Higher Education System for its “poor knowledge production that often does not translate into innovation”.

“South Africa’s competitiveness will rely on national systems of innovation permeating the culture of business and society... Innovation and learning must become part of our culture...”
Value proposition for CPUT: Pathways from *Good to Great*

- CPUT is on a research and innovation *development* trajectory.
- This entails carving a niche identity as a UoT
- Research Uptake strategy is closely aligned with:
  - CPUT vision to be at the heart of technology education and *innovation* in Africa, and
  - mission to *enhance and develop the quality and effectiveness* of our *research and knowledge production*
- **Research Uptake**: A basis to harness
  - our Technology-Innovation strengths
  - Strong links to industry
CPUT 10-year Research and Innovation strategy

- Strategy was informed by, inter-alia:
  - National government policy e.g. the NDP
  - South African National System of Innovation
- Effective Stakeholder Management is integral to the advancement of the strategy
Stakeholder engagement is key in ensuring a seamless trajectory from Applied Research to Uptake

- **CPUT 10-year RTI strategy** and subsequent RU strategy are founded on the notion of realising a seamless trajectory from research to uptake.

Applied Research: Original investigation directed primarily towards a specific practical aim or objective

Research outputs are adapted, and transformed into outcomes for application within designated real-world contexts

**Research uptake**: Communication of outcomes and uptake of end-product. Benefits realised in a societal context.

- **Higher Education Space**
- **Quadruple Helix Collaboration**
  - Laying a foundation for economic output:
    - New jobs
    - Business start ups
    - Entrepreneurship

- **Active Economic Activity**
  - Multiple effect
  - Overall regional impact
Orientation for stakeholder engagement

• Placement of students in industry sectors is a formal component of the undergraduate academic program

• Work Integrated Learning:
  ◦ Co-operative Education, which is responsible for nurturing industry partnerships that result in student work place learning,
  ◦ Service Learning, that drives the integration of community engagement with teaching, learning and research, as well as
  ◦ Civic Engagement, that coordinates volunteer and outreach programs.

• Research is oriented to the applied - Technology innovation is a key strength.
Integrated approach: Quadruple helix

- Academe
- Industry
- Civil Society
- Government
Key message: RU Value Proposition

• Incentives currently are for formal outputs only.

• BUT... visibility of the application of research outputs i.e. research uptake increases traffic to both formal outputs AND the University researcher...
  ◦ .. which enhances image & brand...
  ◦ .. which attracts more funding...
  ◦ ..which provides more resources to do more relevant research
  ◦ ..which attracts better students to do research.

• VISIBILITY is a critical component of research practice.
  ◦ Thus it is important to understand “visibility” of our research, and its uptake amongst BOTH the scientific and user community.
CPUT RESEARCH UPTAKE
STRATEGY AND TACTICS
CPUT RU Definition

• Research Uptake encompasses the processes by which the knowledge which is generated through research is adapted, and transformed into outcomes which are applied within designated real-world contexts.
  ✓ Uptake thus implies communication of research outcomes to users audiences.
  ✓ Uptake also encompasses innovation which is the process of transforming research outputs into a new or improved service, product, process, approach or policy which addresses an identified need in any sphere of society
Elements of RU Strategy: Towards an enabling Environment

- Policy
- Conscientise internal stakeholders
- Synergise research and support structures
- Build internal capacity
- Incentivise
- Multi-disciplinary research
- Alignment with government priorities
- **Strategic partnerships**
- **User participation**
- Adjust research design paradigms
- **Whole research cycle**
- Marketing and communication
- Fundraising strategy
- Evaluating knowledge impact
## RU Mechanisms

<table>
<thead>
<tr>
<th>MECHANISM</th>
<th>Actions</th>
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| Enabling institutional        | • RU Embedded in **integrated RTI strategy** - Buy-in at top management and amongst all stakeholders - Strategy influences policy changes and resource allocation.  
                                 |  
                                 | environment                                                                                                                                | • **Awareness**: RU marketing campaign to promote awareness and visibility of the importance, and value proposition of RU  
                                 |  
                                 |                                                                             | • Encourage **multi-disciplinary** teams to deal with whole problems – solutions which lead to uptake are rarely based on one discipline.  
                                 |  
                                 |                                                                             | • **Prototype** multi-disciplinary environment e.g. Design Park                                                                  |
| Capacity development          | • Science Communication for both researchers and MCD staff  
                                 | (learning)                                                                                                                                | • Awareness on the value of Research Uptake Improving researchers and research visibility  
                                 |  
                                 |                                                                             | • Planning for the Whole Research Cycle  
                                 |  
                                 |                                                                             | • **Research Stakeholder engagement planning, and management**  
                                 |  
                                 |                                                                             | • Increasing visibility of Research Outputs  
                                 |  
                                 |                                                                             | • How to Write a policy brief                                                                                                      |
RU Mechanisms

Dissemination of research findings (message)
- Science communication e.g. Conversation Africa
- Targeted communications to uptake stakeholders

Collaboration between researchers and users (communication)
- **Stakeholder engagement**: Identifying stakeholders;
- Develop skills for appropriate approaches when engaging with stakeholders; Information generation/sharing, consultation, collaboration or partnership, choosing depth of partnerships.
- Training in employing participatory methods in research (e.g. workshops, participatory action research, Living Lab concept, community mobilization etc.)
### RU Mechanisms

| Incentives and reinforcement (motivation through reward) | • Add on a NEW category for research award at Annual Research Day viz. Top 3 Research uptake projects.  
• Adapt promotion policy to include criteria which award research uptake.  
• Adapt requirements for funding of projects |
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<td>Research on research uptake and use</td>
<td>• Development of indicator set to measure knowledge impact in a typical UoT environment</td>
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| Influence (social influence) | • **Training in RU friendly research design approaches**: PAR, Living labs, co-design.  
• Embed RU at project inception |
Policy adaptation example: RU plans required in awarding of CPUT funding
Research Uptake approach: a change management strategy - to embed RU organizationally and in individual behavior and practice
The ecosystem of change

POINTS OF STAKEHOLDER ENGAGEMENT

RTI-Strategic initiatives & Partnerships
- Strategic partnerships
- Research uptake
- RTI Excellence

CPUT Academic Researchers & Innovators
- Research Uptake
- Maximum Impact
- Influence
- Brand |

CPUT EXTERNAL PARTNERS

CPUT MANAGEMENT STRUCTURES
- MCD
- Advancement
- Institutional Planning
- CTS
- Libraries
- HR: Staff Development
- Centre for Continuing Development

CPUT RTP DIRECTORIES
- Research Directorate
- Technology Transfer Office
- Centre for Post Graduate Studies

• Collaborate
• Plan
• Strategise
• Influence Change

CPUT Positioning - Enhance CPUT brand, and stature
Stakeholder Engagement: Three Key elements in the RU strategy

- Full cycle Planning
- Science Communication
- Stakeholder Engagement
Change culture of practice – Focus on whole Research Cycle

Each project has a knowledge and adoption plan. Planning should include budgeting for the legacy stage.

Undertake activities as outlined in the project’s knowledge and adoption plan. Include milestones for reporting on implementation, and updating of knowledge and adoption plans.

Managing the research legacy well can provide important opportunities for improving the uptake and impact of the research.

Include stakeholders and take into account their priority needs.

Whole Research Cycle: Stakeholder engagement

- **Engagement**: Research partnerships with stakeholders, research initiated by stakeholders.
- **Communication**: Stakeholders participate in designing research questions.
- **Information Provision**: Information tailored to stakeholder needs (responsive) delivered in context and face-to-face e.g. workshops.
- **Information Provision**: Information targeted to users but delivered remotely e.g. e-bulletins.
- **Information Provision**: Information not targeted and delivered indirectly or remotely e.g. website.

COMMUNICATION OF RESEARCH TO STAKEHOLDERS (SCIENCE COMMUNICATION)
Renewed impetus for a more balanced communication strategy (at institutional level in the short term; at researcher and project level in the medium term)

**Training:** First science communication workshop in 2015
First train the trainer workshop held in April 2016 (post RUC Workshop)
Conversation Africa: A critical online Science Communication platform

- The Conversation Africa has become an indispensable media resource, providing new ideas and talent for traditional and new media.
- The Conversation reaches an audience of more than 2 million unique browsers a month, and has been read by more than 20 million people through Creative Commons which allows for free republication of all material.
- Many of the CPUT articles have had a unique spin-off by being further published in the national and local South African newspapers, National TV and radio.
24 CPUT Articles since May 2015: Global Reach

South Africa: 42%  Norway: 2%
United States: 22%  France: 2%
Australia: 7%  Germany: 1%
United Kingdom: 5%  India: 1%
Canada: 2%  Netherlands: 1%

See more
Cape scientist creates perfect miniature world

TANNIS FARRER

A TECHNOLOGICAL breakthrough in Cape Town has seen engineers come up with a tiny system that breeds fish, grows vegetables, and uses solar energy.

Forest Basson, an engineer and business unit manager at the Cape Peninsula University of Technology, said: “The fish are placed in containers. Solar energy warms the water while solar cells convert sunlight to electricity to power the pumps.”

“The water from the tanks flows into a grow-bed where vegetables have been planted, and then circulates again.”

“The vegetables grow, the fish keep breeding, and the solar power is stored in batteries for use at night. It is a small-scale sustainable system that could fit into a classroom.”

The system is a mixture of hydroponics and aquaponics. “Integrating renewable energy is what makes it really unique,” said Basson.

Publication: Times, TH [Second Edition]
Date: 2015-07-01
Page: 4

Students aren’t looking for a free ride – they’re broke

Subathy Pathar

Critics of the # FeesMustFall movement have suggested that the governments and universities can’t afford the free tertiary education students are demanding. These critics miss an important point: Students are not looking for a free ride. For many, money is a distressing and overwhelming distraction from their studies. They just want qualifications they hope will lift them and their families out of poverty.

I recently conducted research about the factors that influence five-year students’ experience and academic performance. The majority (94%) needed funding such as student loans, bursaries and scholarships. Some had enrolled for degrees without having their funding confirmed, so they were concerned about finances. Most of the students I interviewed couldn’t rely on their families for financial support. In the study sample, only 21% of the sample and 23.2% of the sample were able to help. Students barely felt this lack of support, one saying: “If I had the financial support from my family, I would have maybe done much better in some of the [academic] work.”

In total, 16% of the participants in my study received some financial support from their parents, 62% relied on personal funding – 16% received student loans and 46% student bursaries – and 5% paid for their own studies. The students’ priority was to secure financial aid before focusing on academic activities. Only once they were able to deal with this hurdle did they shift focus to their studies.

Socialising is an important component of university life, giving students the chance to meet new and different people and to engage in extracurricular activities. But many of the students I interviewed had part-time jobs to try to keep the wolf from the door. This kept them off campus at times when other students were socialising or getting involved in university activities beyond the classroom. This made these students feel less like they belonged at university.

Universities need to provide opportunities to encourage social connections, which can be an important factor for students to achieve a well-rounded success. How should universities help students who are forced into employment and prioritise this ahead of their academic studies? One suggestion is for them to play a more active role in ensuring that students don’t have to wait for money.

Some funding schemes pay out only after the academic year starts. Others confirm student funding only after term has started. This results in many students not being able to pay the upfront registration fees. Policies and programmes are needed to make financial aid available from the first day of study – or even weeks before a course starts.

In addition, student fees should be determined by individual applicants’ economic and social circumstances. Addressing students’ funding challenges in good time would mitigate the stress they encounter in trying to secure financial aid while also trying to cope with their academic and other commitments, such as finding a job and sorting out accommodation, food and living expenses.

Universities need to produce graduates who can do great things for their country. To do this, they must realise that the financial stress many students experience is a terrible burden——one that distracts potentially excellent graduates from their academic punch. — theconversation.com

Subathy Pathar lectures in academic development at the Cape Peninsula University of Technology
Research Uptake CSF’s across a sample of projects at CPUT

• The lead researchers were passionate about their fields – *they want to make a difference*

• Different researchers had differing notions of what constituted uptake – ranging from communication of results, to the implementation of a technology, or commercialisation of a product.

• Whilst most projects were based on applied problems, uptake and driving an impact agenda was not always planned for

• **Identifying the correct partners in early stages of the research was essential**

• Funding is important – especially for prototype stages of development
Stakeholder management actions to date

• **Institutional stakeholder engagement strategy**
  ◦ Executive Management directed the DVC Research to lead an Institutional stakeholder mapping exercise and a course of action to develop a strategy
  ◦ 2 workshops held to date

• **Individual researchers**
  ◦ First train the trainer workshop held in April 2016, using DRUSSA handbooks
  ◦ Requires careful integration into practice as methodology may appear to be overwhelming
EXAMPLES OF STAKEHOLDER ENGAGEMENT
Local and Provincial Government

- Cape Higher Education Consortium (CHEC), comprising 4 western cape universities
  - Joint task teams with Provincial Government and City of Cape Town
  - A platform to engage as a higher education sector

- Research project funding
  - CHEC – Govt agree on thematic areas for collaboration
  - Open call for projects
  - Projects require a government partner
  - Research uptake has a high probability given upfront partnership
Reaching out to commercialization partners

• CPUT hosted its first innovation showcase in 2015

• The objective is to pool innovations – attract potential partners and venture capitalists to advance innovation into commercial stage
Inviting innovation stakeholders home
The CPUT Innovation System

- Partner organisations & Consultancy
- Funding & Financial support
- Ideas and Innovations
- Users, Market, Society

CPUT Innovation System

- Startups, Licencing opportunities
- Transfer to collaborating universities
- Direct applications
- CPUT Industry Collaboration
From smaller student project innovations: Snugpack

TO high end technology innovation e.g. Ocean observer smart buoy
What the group never imagined was that their product would prove such a success and that its magnetic hinge and groove system would be patented.
Flow-Viz technology is a highly specialised industrial fluids characterization system that improves process and quality control within a fluid production line.

- Research work leading to this invention began 15 years ago, with CPUT coming aboard in 2007.
- The industrial Flow-Viz system, an invention by CPUT and a Swedish partner
- International spin-off company imminent.
- European AND US patents
DEVELOPMENT OF INFRASTRUCTURE TO FACILITATE STAKEHOLDER ENGAGEMENT
Proposed flexible / modular approach

Shared facilities:
- Third spaces, public spaces
- Meeting and training rooms, flexible office spaces, business & specialist services, event spaces

Coordination function
With / through Design Institute:
- Design industry development & info
- Design trends, materials & tech resources
- Awards, showcasing, events coordination

Initial modules to expand over time, others will be added based on securing partners, demand, evolution of other support for design over time …

Design Hub

"Ideas to market"

Corporate design team & design company offices

Design-related SPV colocation

"Formal" design museum

Other requirements:
- Facilities management
- Parking
- Residential / B&B / apartment/ small hotel

Initial modules
- Consulting & coaching
- IP support & information
- Events
- Prototyping and short run production equipment
- Consumer testing facilities & services
- Joint research projects

Design Enterprise Support

- Design enterprise consulting & coaching
- Graduate support & incubation

Design Education Centre

- Flagship design course
- Joint courses
- Pilot courses
- Summer schools
- Short courses & professional development
- Residencies
- School programmes – after school, weekend,

Other complementary centres e.g. CT Science Centre

WDC legacy projects?
MANAGING STAKEHOLDER INFORMATION: INTELLIGENCE GATHERING
Good Practice Statements

• **34**: Central mechanisms should exist to record successful research uptake activity, and to learn from the lessons of previous projects and share success stories.

• **36**: The University should keep records of its external contacts and potential research users in specific fields, and share these internally.

• **CPUT PROPOSED NEW GPS:**
  ◦ A University wide stakeholder map, partnership strategy, and information management system is a necessary foundation to ensure successful research uptake outcomes. This map and strategy must be articulated at Departmental level.
## RTI blueprint action items

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<th>Strategic partnerships</th>
<th>Develop systems support for RTI partnership management</th>
<th>22.1 Develop a partnerships management information system – preferably integrated with research database</th>
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<tbody>
<tr>
<td>22</td>
<td>Exec Director / DVC Knowledge Management.</td>
<td>DVC Office</td>
<td>Research Directorate</td>
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<th>Strategic partnerships</th>
<th>Guidelines on strategic RTI partnerships - including criteria for partnerships, partnership approaches, and scanning for prospective industry and other partners to form potential target markets for CPUT RTI</th>
<th>23.1 Set-up task team to lead development of guidelines including M/E framework</th>
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<td>23</td>
<td>DVC RTIP</td>
<td>Quality Management Directorate</td>
<td>DVC RTIP</td>
<td>Executive Director HR</td>
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Problem statement

- Managers at various levels do not have knowledge of partnerships within their operational purview.
- Risks for the institute without having a single repository of partnership data.
- Inability to take strategic decisions regarding partnerships.
- Lack of synergies between different units/departments – we do not harness full potential of existing partnerships.
- Difficulty in reporting e.g. to DHET, and other requests
Draft data entities