



THE TECHNOMART PLATFORM

An Online Gateway to Uganda's Research and Innovation Ecosystem

www.technomartuganda.com

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Uganda National Council for Science and Technology



Technomart : Uganda's Gateway to Research & Innovation

Technomart is a pioneering Digital Platform whose aim is to Revolutionize access to sharing and management of Research & Innovation Infrastructure in Uganda.

Research Equipments ▾

Search



Research Equipments

Technomart transforms how researchers, institutions, and innovators access, share, and manag...



Researchers / Experts

Find top Ugandan scientists, engineers, and researchers on Technomart. Connect, collaborate, and drive...



Innovations

Discover cutting-edge research, breakthrough technologies, and innovations ready for...



Tech Challenges

Connect with Innovators to Solve Your Technology Needs

Goal:

Technomart Platform is working to become Uganda's go-to national one-stop centre for Science, Technology, and Innovation.

Our mission is to connect innovators, researchers and industry with the information they need to collaborate, accelerate progress, and fuel Uganda's socio-economic development.

WHAT THE TECHNOMART OFFERS

The screenshot shows the top portion of the Technomart website. At the top left is the logo for Technomart UNCST, which includes a circular icon with a microscope and a gear. To the right of the logo is a navigation menu with links for Home, Research Equipment, Experts, Innovations, Tech Challenges, and About us. Further right are two buttons: a green 'Login' button and an orange 'Register' button. Below the navigation is a large dark blue hero section with the title 'Technomart : Uganda's Gateway to Research & Innovation' in white. Underneath the title is a paragraph: 'Technomart is a pioneering Digital Platform whose aim is to Revolutionize access to sharing and management of Research & Innovation Infrastructure in Uganda.' At the bottom of the hero section is a search bar with the placeholder text 'Search here...', a dropdown menu currently set to 'Research Equipments', and an orange 'Search' button.



Research Equipments

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Research Facilities and Equipment Sharing

- Sharing of research facilities and Equipment, e.g. laboratories, equipment and specialised tools
- Location of infrastructure/equipment
- Access credentials-
- Details: in-charge and contact details
- *A national portal that discovers, harvests and aggregates data about institutional research facilities and equipment across Uganda. It's designed to offer an easy search interface to find and use a particular piece of equipment that may be located at another university or research institution*
- Our request: Add your research facilities & equipment data



Research Equipments

Technomart transforms how researchers, institutions, and innovators access, share, and manage research infrastructure in Africa –connecting you to equipment, experts, and innovations seamlessly.

Search

Search

In addition to using the search bar, you can explore and download equipment datasets directly from the Institutions tab on the Technomart platform. Contribute Your Research Equipment, Experts, and Innovations Data

Share your research equipment data

Sharing your institution's research equipment, Experts, and Innovations data on Technomart is simpler than you might imagine. For step-by-step guidance, refer to our Frequently Asked Questions (FAQs). Our dedicated project team is available to provide technical support and assist with meeting the requirements for publishing your equipment, experts, innovations, and Tech challenges dataset. For assistance, please reach out to us at help@technomartuganda.com. Already Sharing Your Institution's Data?

Already sharing your institution's dataset?

If your institution is already contributing data, visit the Institutions tab to review the status of your data published and assess data quality. Acknowledgements

Acknowledgements

The Technomart service, which provides data on Research Equipment, Science and Technology Experts, Innovations, and Tech Challenges, was developed by the Uganda National Council for Science and Technology (UNCST) with funding from IDRC-Canada, through the Science Granting



Equipment Detail



S/N: CN2003A146

GAS CHROMATOGRAPH (GC), AGILENT

Description

Methanol Content, Pesticide residues, Fatty acid profiling

Technical use

Methanol Content, Pesticide residues, Fatty acid profiling

Field : Medical and Health Sciences

Department : TESTING DEPARTMENT

Institution of affiliation : UGANDA NATIONAL BUREAU OF STANDARDS

Location : Uganda National Bureau of Standards, Kampala, Uganda

Get in touch

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STI Human Resources

- Expert profiles (from academia or industry) to initiate collaboration; Consultancy
- A National Human Resource Database

Researchers / Experts

Find top African scientists, engineers, and professionals for collaboration and innovation.

Search

In addition to the search function above, you can also explore researcher profiles through the Institutions tab and connect with experts from various institutions.

Share your research expertise

Contributing your institution's research expertise is simpler than you might think. Check the [Frequently Asked Questions] for guidance. Our project team offers technical support to help you meet the requirements for publishing researcher profiles. For assistance, please contact help@technomartafrika.com in the first instance.

Already sharing your institution's researcher data?

If your institution is already providing researcher profiles, visit the Institutions tab to check the status of your data submission and ensure its accuracy.

Acknowledgements

The Researcher Data Service was initially developed by the University of Uganda with funding from UNCST, in collaboration with Technomart. It is now managed by Technomart. For more background information, please visit the About Page.



Edwin Kamalha

Dr Kamalha is a senior Lecturer and Head of the Department of Polymer, Textile and Industrial Engineering at Busitema University; over sixteen years of University teaching and research. over thirty published works in areas of Functional materials,

Qualifications

PhD: Triple Doctorate (2014-2018) in Sustainable Management and Design for Textiles, awarded by: Soochow University (Textile Engineering) Politecnico di Torino (Chemical Engineering) ENSAIT-Lille 1 University of Science and Technology (Materials, Energy, and Mechanics) MSc: Textile Science and Engineering (2010-2013), Donghua University, Shanghai, China. BSc: Textile and Clothing Technology (2004-2008), Kyambogo University, Uganda.

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Experience	:	16 Year(s)
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Research Gate	:	https://www.researchgate.net/profile/Edwin_Kamalha
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Innovation Market Place

- Access to new innovations that have potential for commercialisation.
- A supermarket for innovations and new technologies.

A one-stop centre for:

- The industry looking for research-based solutions to industrial challenges and S&T expertise.
- Academia seeking private sector engagement to leverage R&D results with commercial potential.

Overall Goal: Drive commercialisation by improving visibility, fostering connections, and supporting innovators in bringing ideas to market.



Innovation Marketplace

Welcome to the Uganda Innovations Marketplace: Connecting Innovation with Opportunity

Search

Discover groundbreaking research results and innovations with social, commercial, and economic potential in one place. The Uganda Innovations Marketplace is a dynamic gateway connecting Uganda's brightest minds—researchers, scientists, and innovators—with the industries and investors poised to bring these discoveries to life.



We're building a supermarket for innovation, showcasing cutting-edge processes, products, services, business models, and technologies ripe for commercialisation. Whether you represent a research institution, a forward-thinking business, or an investment firm, this platform offers a unique opportunity to:

- > **Explore:** Discover a diverse range of innovations spanning various sectors, each with the potential to transform industries and communities.
- > **Connect:** Forge valuable partnerships with researchers and innovators to drive commercialisation through funding, licensing, or joint ventures.
- > **Invest:** Identify promising investment opportunities in groundbreaking technologies and solutions with strong market potential.
- > **Commercialise:** Bring innovative processes, products, services, business models, and technologies to market through licensing agreements or collaborative development.



Innovation Detail



SMART WALKING STICK FOR THE BLIND.

Problem Statement

Visually impaired individuals in Uganda and similar low-resource settings face significant mobility challenges due to inadequate access to affordable, context-appropriate assistive technologies. Traditional white canes offer limited utility in detecting obstacles beyond arm's reach, while imported smart canes—equipped with sensors or GPS—are prohibitively expensive (often exceeding \$500 USD) and ill-suited to Uganda's rugged terrain, dense urban environments, and frequent power outages. This forces millions of blind individuals to navigate unsafe roads, open drains, potholes, and chaotic traffic with minimal protection, leading to frequent injuries, social isolation, and reduced independence. Additionally, the lack of durable, locally adapted solutions exacerbates economic exclusion. Over 70% of Uganda's visually impaired population lives in poverty, unable to afford high-tech aids or repair imported devices. Dependency on caregivers limits educational, employment, and social opportunities, perpetuating cycles of marginalization. Kumi University's Smart Walking Stick directly tackles these barriers.

Executive Summary

Smart Walking stick is basically a product from Kumi University that Targets the blind people.its designed in a way that it uses a sensor that detects objects a head so a blind person can tell.

Target Market

The primary beneficiaries are visually impaired individuals in Uganda and across sub-Saharan Africa, where limited access to affordable assistive devices leaves millions reliant on basic canes or unsafe navigation. This includes: Blind Adults and Children: Enhances independence by detecting obstacles (e.g., potholes, vehicles) in real time, reducing accident risks in urban and rural settings. Low-Income Populations: Priced significantly lower than imported alternatives, the stick caters to households unable to afford high-tech solutions. Secondary Beneficiaries: Caregivers & Families: Reduces the



Product Catalog
 "Effective and Healthy Shopping Only at Our Store"

Afrikado INDUSTRIES
 QUALITY ASSURED

 UCX 20,000 100ml- HAIR OIL	 UCX 30,000 250ml- HAIR OIL	 UCX 10,000 50ml- SKIN OIL
 UCX 35,000 Hair Spray	 UCX 50,000 Lotion	 UCX 10,000 Soap

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 Thank you for choosing us as your partner in wellness and sustainability. Together, we grow, thrive, and create a greener future.

Email: pkekirunga@gmail.com Call Find Us: **+256 706 301839**
 Amans House- 8MW2+VM9, Jinja Road, Kampala

Virgin Avocado Oil for the Cosmetics Industry

Problem Statement

Afrikado Industries aims to reduce avocado waste and empower local farmers by repurposing these low-grade avocados

Executive Summary

Afrikado Industries is a youth-led startup based in Uganda, primarily focused on adding value to Hass avocados by processing them into high-quality avocado oil. This oil is supplied as a raw material

Target Market

The oil is sold to micro, small, and medium enterprises in the local cosmetics industry, addressing the need for quality and unadulterated avocado oil

Market Opportunity

The virgin oil innovation taps into the growing \$610.5 million global avocado oil market, offering competitive advantages through sustainable sourcing & quality products for local cosmetics businesses

Funding Requirement

Afrikado Industries aims to increase its production capacity to 500 litres per week with funding. The company seeks \$50,000 to boost production, diversify its product range and conduct more R&D

Category : Manufacturing

Innovation Stage : Ready for Commercialization

Intellectual Property : Trade Secret

Afrikado Industries (U) Limited



Tech Challenge

The Technology Challenge Hub: *Driving Demand-Driven Innovation actively addressing industry needs.*

How it Works:

- Industries/stakeholders post specific technology challenges (problem, objectives, desired outcomes).
- Researchers/innovators propose solutions, engage in discussions, and form collaborations.

Purpose/Benefits:

- Fosters demand-driven innovation.
- Connects real-world industry problems with research/innovation capabilities.
- Facilitates public engagement in solving industry problems.
- Generates innovative solutions.



Tech Challenges

Connect with Innovators to Solve Your Technology Needs

Search



Collaborate with Uganda's top innovators to address technology gaps. To find innovative solutions to major technological challenges, we collaborate with partners to identify important issues and link them with researchers and entrepreneurs. Explore existing technology needs or post your own to accelerate innovation.

Search Results (2)





Tech Challenge Details



Exploring Locally Sourced and Sustainable Alternatives to Bitumen for Road Infrastructure Development in Uganda

Description

Background

Bitumen, a critical component in asphalt for road construction, accounts for a significant portion of Uganda's road project costs. Uganda relies heavily on imported bitumen, exposing its infrastructure programs to global price volatility, importation logistics, and supply chain inefficiencies. This dependency has led to delayed projects, reduced road network expansion, and strained public budgets. With Uganda's Vision 2040 emphasizing infrastructure development as a pillar for economic growth, identifying affordable, locally available alternatives to bitumen is imperative to ensure sustainable and equitable infrastructure progress.

Research Problem

How can Uganda reduce its reliance on expensive imported bitumen by developing alternative road construction materials that are cost-effective, environmentally sustainable, and technically viable?

The primary Objective is to identify and evaluate alternative materials or technologies that can replace or reduce bitumen use in road construction.

Desired Outcome

1. A ranked list of viable bitumen alternatives suited to Uganda's context.
2. Performance data and specifications for integrating alternatives into national road standards.
3. Delivery recommendations for incentivizing local material production and adoption.

Future/Ongoing Development



Production Facilities & Equipment Sharing

Problem:

- Ugandan startups face significant barriers due to limited access to costly production equipment, hindering prototyping, testing, and scaling.

Proposed Solution:

- Create a centralised, publicly accessible database of shared production equipment.
- Includes equipment details, usage terms, and payment structures.
- Located at incubation centres, innovation hubs, and private facilities offering contract services.

WHY THE TECHNOMART?



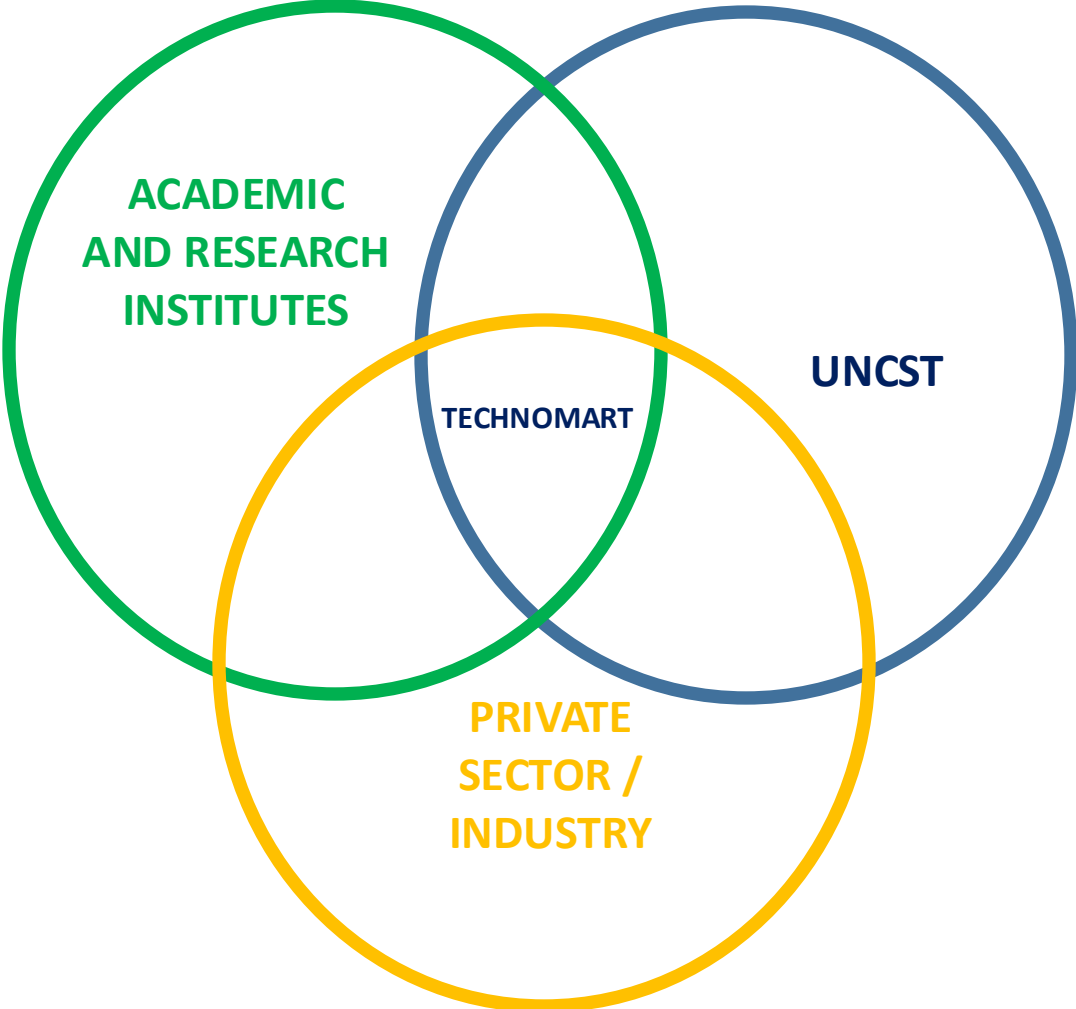
Private Sector Companies

- Gain a competitive advantage by identifying cutting-edge innovation and expertise from universities and institutes nationwide.
- Connect with teams actively looking for industry partners
- Benefit from the latest academic breakthroughs
- Develop connections between equipment data and industry

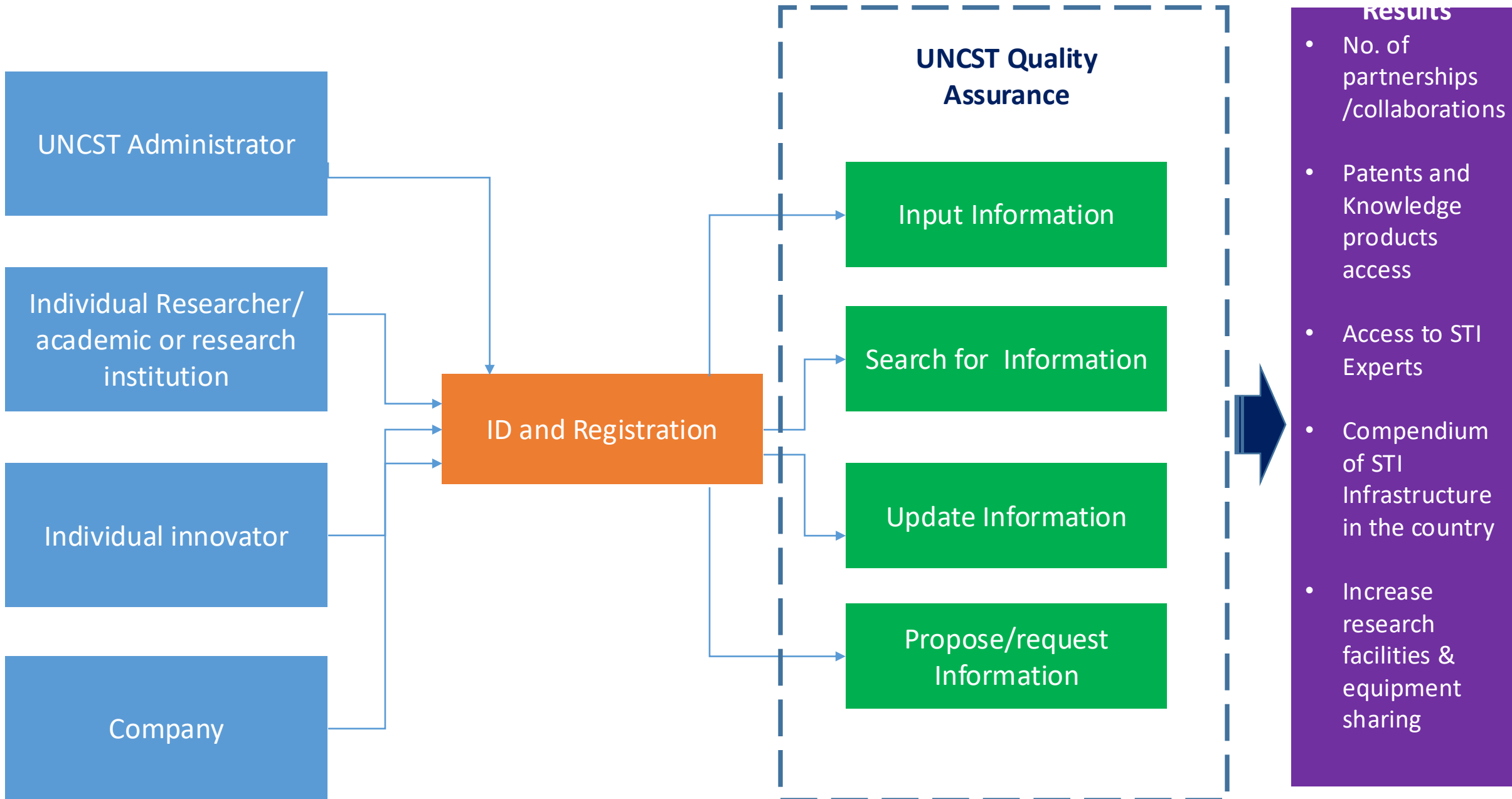


Academic Researchers

- Connect with industry
- Help create solutions to industrial and societal challenges
- Start partnerships to validate, commercialise and scale up discoveries
- Streamline the equipment sharing /access process
- Embed asset sharing in institutional and research workflows



HOW THE TECHNOMART WORKS



Thanks for listening

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