

MAKERERE



UNIVERSITY

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# Public Presentation for the Position of **Second Deputy Vice Chancellor, Finance and Administration** of Makerere University

**Bruce J Kirenga**, MCBhB, MMed, MCR, PhD, FRCP (London)

Associate Professor of Medicine

**Chief Research Scientist** and **Director**, Makerere University Lung Institute

Monday May 13 2024

Makerere University School of Public Health Auditorium





# Outline of presentation



- **About myself**
- **Suitability for the position**

- Resource mobilization and Management
- Research and teaching experience



- Resource mobilization
- Process efficiency improvement
- Flagship projects
- Quality improvement



- **Landscape of Higher /University Education in Uganda**
  - History
  - Sector indicators
  - Governance of public universities
- **Plan/vision for the Mak F&A**





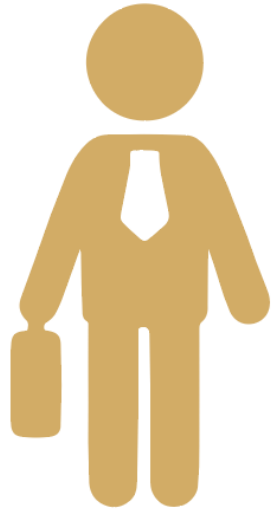
# About myself



- Born in 1975
- Academics

Date	Degree	Subject	University/Institution
October 1997-August 2002	MBChB	Medicine and Surgery	Makerere University
August 2006-May 2009	MMED	Internal Medicine	Makerere University
2008-2009	Certificate of Training	Clinical research Fellowship	Royal tropical institute, Amsterdam
2009-2012	Professional course	Specialty Registrar (Pulmonary)	Mulago Hospital/Makerere University College of Health Sciences
2013-2014	Certificate of Clinical Training	Pulmonary Medicine	Yale University School of Medicine, Yale University
2015-2019	PhD	Medical sciences	University of Groningen, The Netherlands





# Employment



<u>From</u>	<u>To</u>	<u>Job Title</u>	<u>Institution</u>
11/2015	To date	Director	Makerere University Lung Institute
06/2022	To date	Associate Professor	Makerere University
01/2017	06/2022	Senior Lecturer	Makerere University
09/2012	01/17	Lecturer	Makerere University
05/2009	08/2012	Registrar Pulmonary Medicine	Mulago Hospital
09/2004	08/2006	Study Medical Officer	Makerere University/Mulago Hospital
10/2003	08/2004	Medical officer	Kisubi Hospital



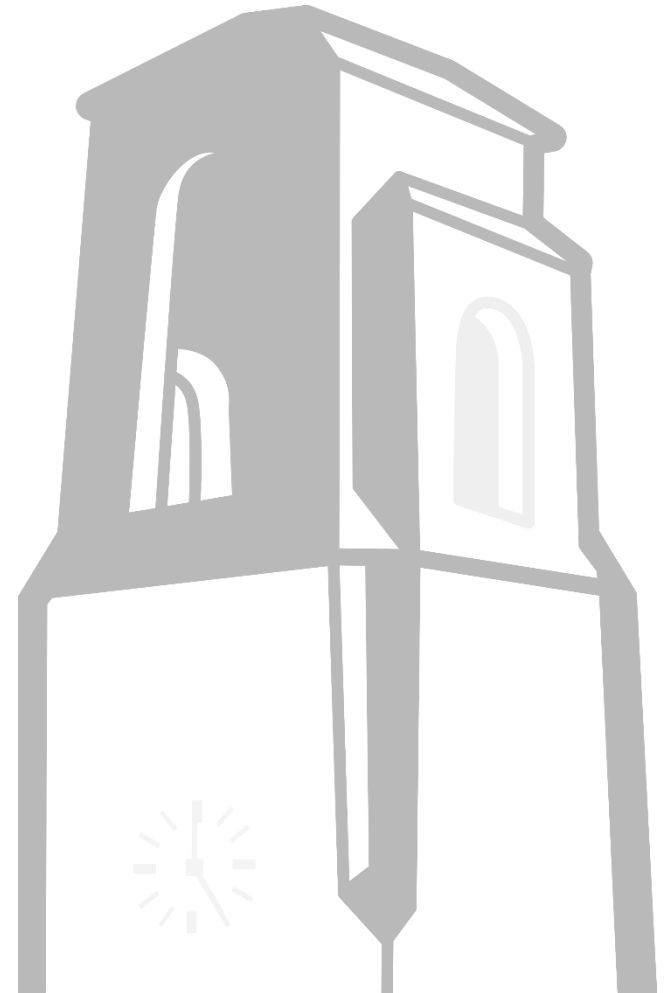


## Suitability for the position

Leadership and management experience

Resource mobilization and control

Research and teaching experience



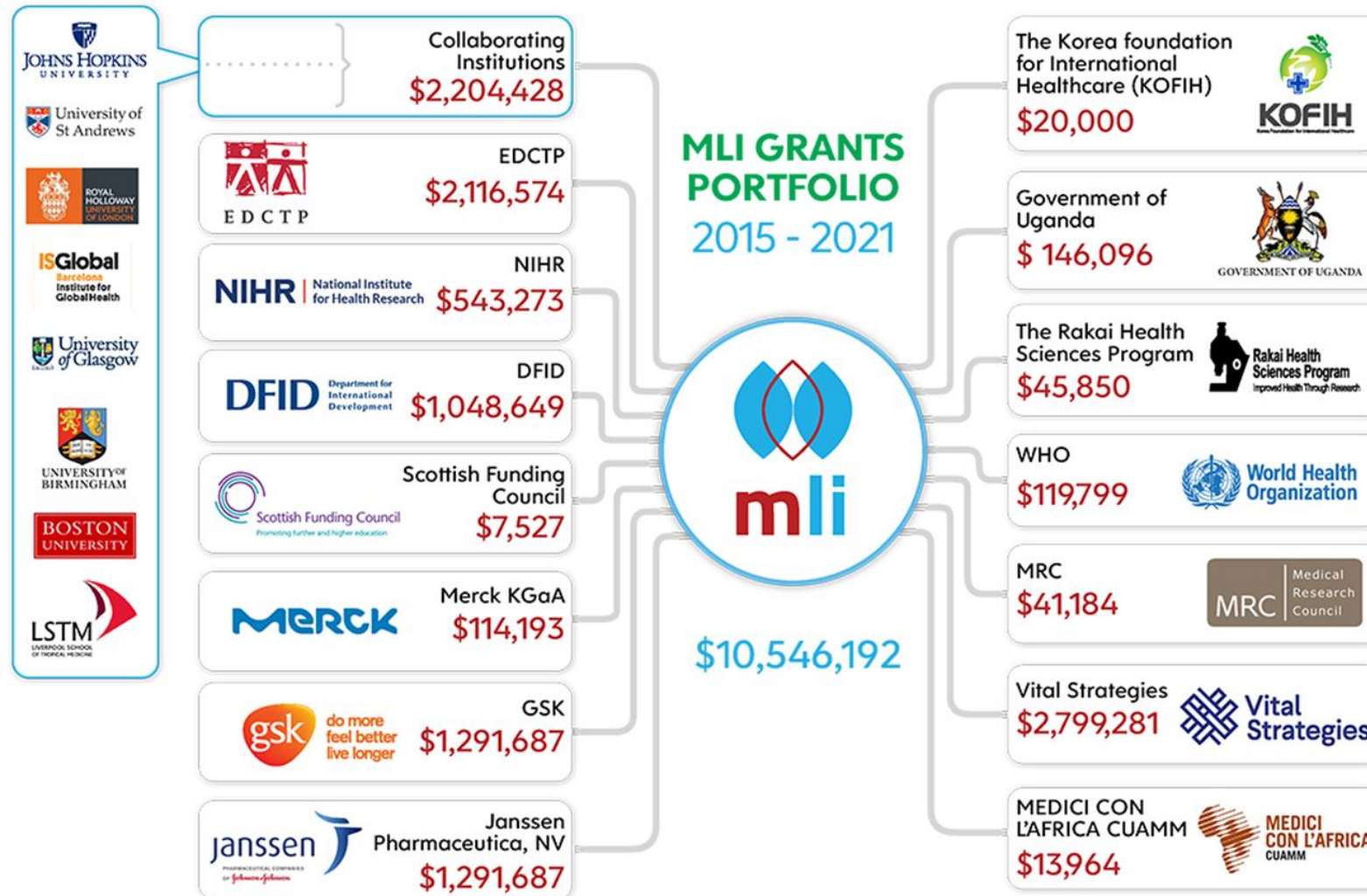


# Resource mobilization and control

- Key to the function of the DVC, F&A is finance resources control and resource mobilization.
- **Makerere University Lung Institute (MLI)**  
**As founder and Director, I have mobilized about 59 M USD** (25M USD contracted funding and 34M at negotiation stage) for Makerere University Lung Institute (MLI) in form of grants, donation and service provision income
- **Microhaem Scientifics (MHS) company**
  - Am also the chairman board of directors of MHS a local medical equipment and supplies company that we started 12 years ago
  - We have grown it to start manufacturing both IVD and vaccines in Uganda.
  - We recently launched the first 4th generation IVD manufacturing plant in Africa
  - **With my leadership we fundraised 35m \$ to set up this plant.**
  - It's expected to bring in this country about 3.19b usd/ year in foreigners from only our Eastern Africa region



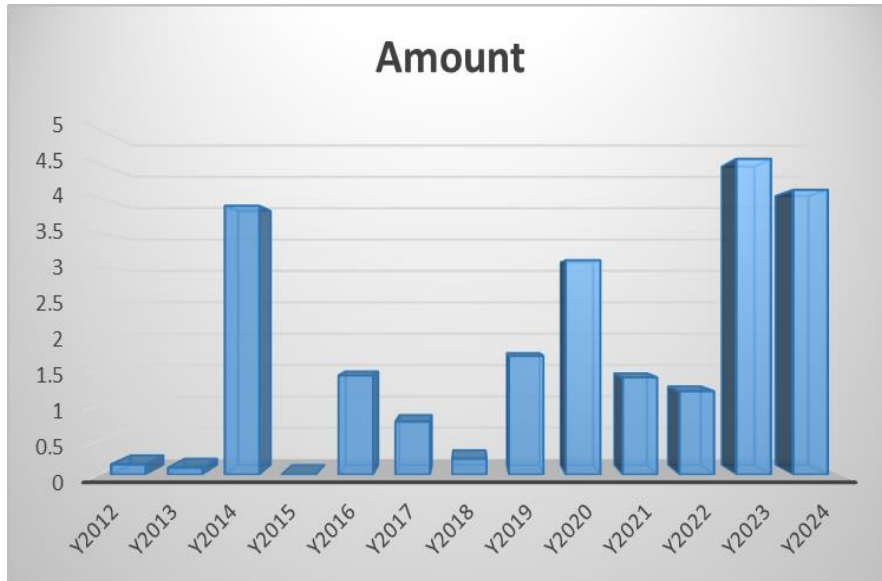
# MLI over the years



- JOHNS HOPKINS UNIVERSITY
- University of St Andrews
- ROYAL HOLLOWAY UNIVERSITY OF LONDON
- ISGlobal Barcelona Institute for Global Health
- University of Glasgow
- UNIVERSITY OF BIRMINGHAM
- BOSTON UNIVERSITY
- LSTM LIVERPOOL SCHOOL OF TROPICAL MEDICINE



# 12 year trajectory of grants, in USD



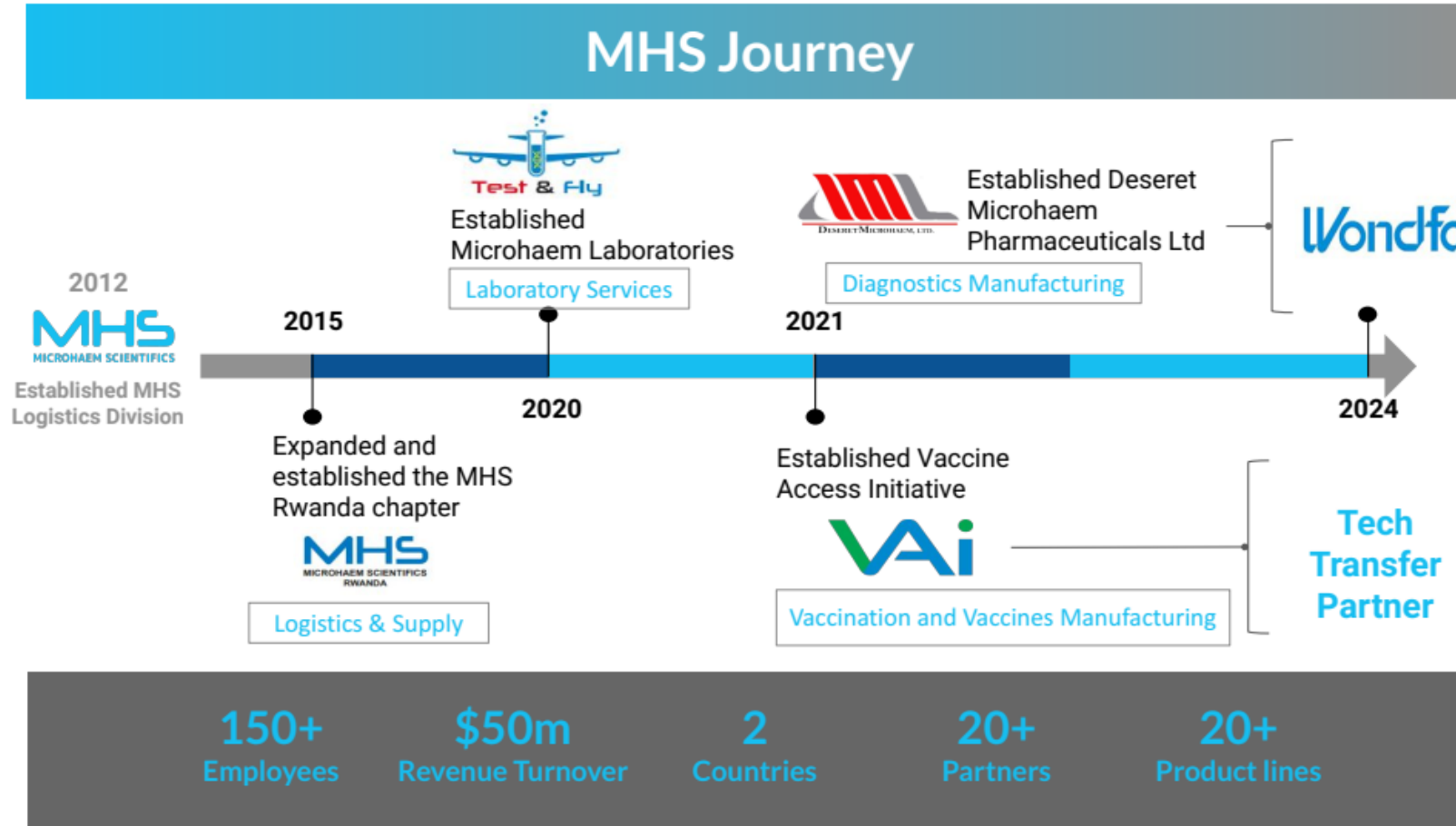
Year	Grant name	Amount (USD)	Funding body	Role	Status
2012	FRESHAIR1	150,000	IPCRG, UK	PI	Completed
2014	Trust In Science	100,000	GSK	PI	Completed
2013	PR Pilot trial	250,000	MRC UK	PI	Completed
2014	Global Bridges	99,927	Mayo Clinic USA	PI	Completed
2014	First National TB survey	3,000,000	Global Fund, Geneva	PI	Completed
2016	FRESHAIR_H2020	224,125	EU H2020	PI	Completed
2016	African Severe Asthma Program	1,021,860	GSK	PI	Completed
2016	GEC0	425,000	MRC UK	PI	Completed
2017	STREAM	2,980,000	Vital Strategies/USAID	PI	Completed
2017	IMPALA	341,000	NIHR	CO PI	Completed
2017	EXIT TB	298,555	EDCTP/EU	PI	Completed
2017	MAKNC0 planning	46,000	NIH	PI	Completed
2017	PCS	172,500	WHO/USAID	PI	Completed
2018	KUPUMUA	18,000	Crowd fund	PI	Completed
2018	Global RECHARGE	207,900	NIHR	PI	Completed
2019	MEASURE QTSA	153,000	USAID	PI	Ongoing
2019	Gender Intersection	30,000	WHO	CO PI	Completed
2019	Theo	350,000	NIH	PI	Ongoing
2019	MAKNC0	1,140,000	NIH	PI	Ongoing
2019	MAKNC0 HIV planning	46,000	NIH	PI	Ongoing
2020	LIGHT	1,088,873	FCDO/DFID	PI	Ongoing
2020	US4 Lung Cancer	1,870,000	NIH	PI	Completed
2020	COVIDRES	150,000	MAKRIF	PI	Completed
2021	TEEN TB	55,000	MAKRIF	PI	Completed
2021	UBV	180,000	STI/OP	PI	Completed
2021	ICORNAVAC	250,000	China	CO PI	Completed
2021	TICO	400,000	MRC UK	CO PI	Completed
2021	WHS	425,800	WHS and others	PI	Completed

Year	Grant name	Amount (USD)	Funding body	Role	Status
2021	COVID-19 SOPs Training for Health Workers	97,486	WHO	PI	Completed
2022	Implement NLP programs on TPT	30,000	WHO/NLP	PI	Completed
2022	CONAT 1	854,054	STI/OP	PI	Ongoing
2022	COVEP	745,000	China CDC	PI	Ongoing
2022	Tokomeza/Solidarity trial	3,200,000	WHO	PI	Ongoing
2022	KCCA SA/EI	80,000	Expertise France	PI	Ongoing
2023	CAA	365,000	NIHR	PI	Ongoing
2023	DRS2	1,820,000	GF/USAID	PI	Ongoing
2023	FA4Life	254,000	EU Horizon	PI	Ongoing
2023	CONAT2	1,351,351	STI/OP	PI	Ongoing
2023	TB DSD	60,000	IDU/CDC	PI	Ongoing
2023	PAC	100,000	Global Fund, Geneva	PI	Ongoing
2023	STEP2C	185,000	Panacea	PI	Ongoing
2023	CCV	280,000	STI/OP	PI	Ongoing
2023	TB LAM	49,990	CHAI	CO PI	Completed
2023	KTBAir	110,611	NIH	CO PI	Ongoing
2024	SMART Trial	815,000	Macmaster University	PI	Contracted
2024	AfriCHIM	30,000,000	CEPI	PI	Pending contract
2024	Second National TB survey	3,816,000	GF/USAID	PI	Pending contract
2024	PARADIGM	312,500	MRC UK	PI	Pending contract
	Total contracted	25,871,032			
	Total pending	34,128,500			
	Grand Total	59,999,532			





# MHS at a glance



# Finance control

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- **As Director of MLI and Board Chair MHS** I have gained experience in resource control- planning, budgeting, accountability, audit and other risk management processes.
- Another source of my finance management experience comes from **my experience as PI of several large projects.** At Makerere University project finance control starts with the PI. PI reviews and approves all requisitions and is responsible for accountability.



# Management

## 1. Head of Pulmonology unit Mulago National Referral Hospital, 5 years



### Roles

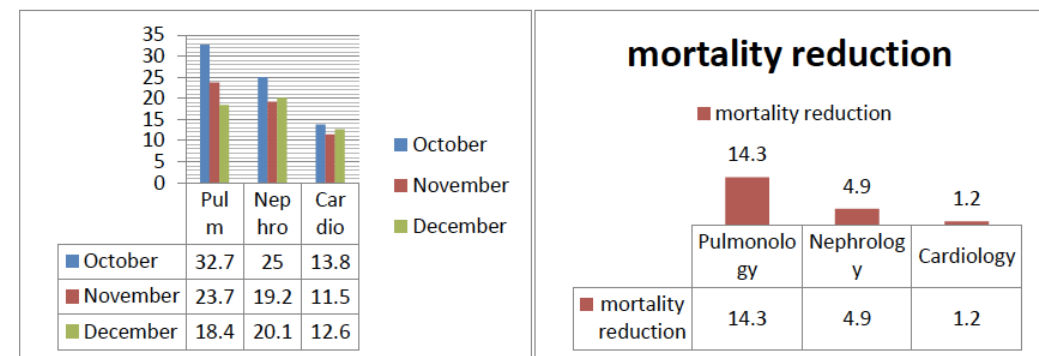
- Organization and provision of care, teaching and research in the unit
- Preparation of reports
- Management of staff in the unit especially well fare
- Unit maintenance



### Key achievements

- Establish Quickcare bundle for critically sick patients which reduced mortality by 40%

Figure 1. Mortality by month and reduction between October and December: 2014



## 2. Founder and Director Makerere University Lung Institute, 8 years

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### Key roles

- Resource mobilization
- Planning including budgeting
- Accounting officer- organizing internal and external audit
- Human resource management
- Infrastructure development and maintenance
- Procurement planning and execution



### Key achievements

- Grew institute annual income from UGX 24M UGX (staff salary) in 2015 to over UGX 20Bn in 2023
- Personnel from 4- over 150 including 30 scientists
- Expanded built space from 20sqm to 4900sqm built and unbuilt space of 9000sqm
- Established policies for all key management functions



***My promise is to extend this success from one of unit of the university to all units***



# 3. Chair, Microhaem Scientifics (MHS) Board, 12 years

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## Key roles

- Policy direction of the company
- Scientific advisor
- Mentorship
- Resource mobilization
- Business strategy
- Personnel structure
- Audit



## Achievement

- Business growth from less than USD 1M in 2012 to USD 50M by end of 2023
- Transformation from a distribution to manufacturing company
- Physical infrastructure growth-office space of 7800sqm



# Research, Innovation and Teaching



- This position in its docket of resources mobilization, it supports several grants functions
- Over a period of 12 years, I have been able to publish over 200 publications in peer reviewed journals with over 50% being published in the last 5 years
- I have supervised 20 graduate students and currently supervising and supporting 10 PhDs
- I have initiated 4 innovations including- medical ATM, solar powered oxygen concentrator and a community initiative called CAST TB



# Early life leadership

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- Head Boy primary school
- Head lower secondary school
- Hostel prefect, Makerere College School
- Health Minister, Mitchell Hall
- Finance Minister, MUMSA
- President, MUMSA



# Summary

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- It may appear that this is me, this is not me but a team
- A leader should act as an enzyme,
  - *An enzyme is a substance that acts as a catalyst in living organisms, regulating the rate at which chemical reactions proceed*
    - *without itself being altered/consumed in the process.*
    - *Need in minute quantities*
- Teams can achieve a lot, humans have much more potential than we can imagine
- Quote, [Harry S Truman](#) (the 33rd president of the United States)
- *“It is amazing what you can accomplish if you do not care who gets the credit”.*





# Landscape of Higher /University Education in Uganda



To develop sound business plan for Mak, one needs to understand the Higher Education sector and how it aligns to the challenges of the sector in the 21<sup>st</sup> century



# Definitions

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- Higher education refers to an education offered in post-secondary school education institutions leading to the award of either a certificate, diploma or degree
- Essentially universities are part of the HE sector but universities offer training and advance new knowledge while other tertiary institutions focus on training and limited advancement of new knowledge
- The Universities and Other Tertiary Institutions Act, 2006 (UOTIA, 2006) as amended categorizes the higher education institutions in Uganda into three broad categories. These are Universities, Other Degree Awarding Institutions (ODAs), and Other Tertiary Institutions (OTIs).
- *Higher educational institutions include not only universities and colleges but also various professional schools that provide preparation in such fields as law, theology, medicine, business, music, and art. Higher education also includes teacher-training schools, junior colleges, and institutes of technology.*



# History Higher/University Education in Uganda



- Plans to initiate Higher education (HE) began in Uganda around 1929 when colonial observers saw that Makerere could develop into an institution of higher education.
- Makerere had began in 1922 but as a school to train African boys as carpenters and mechanics
- It transformed into vocational-professional college to train medical assistants, surveyors, school teachers and similar auxiliary personnel for the colonial service.



# History cont'd

- In 1937, following the De La Warr commission recommendation Makerere was reconstituted into a secondary school and a Higher College of East Africa
- It therefore appears that HE in Uganda was born in 1937
- It became a degree awarding institution around 1949/50 following Lord Asquith commission's recommendation that Makerere be reborn as the University College of East Africa
- Makerere University was the only degree-awarding institution in the country until 1988, when the Organisation of Islamic Conference created the first private university, Islamic University in Uganda (IUIU)



# Recognized Higher Education Institutions, Dec 2022



SN	Category	Number
1	Public universities	10
2	University with Separate Act	01
3	Private Chartered	11
4	Private Provisional License	32
	<b>Total of Universities</b>	<b>54</b>
5	Public ODAIs	02
6	Private ODAIs	18
	<b>Total ODAIs</b>	<b>20</b>
7	Public OTIs	52
8	Private OTI with Classification and registration	25
9	Private OTI with Provisional License	101
	<b>Total OTIs</b>	<b>178</b>
	<b>HEIs Total</b>	<b>252</b>



# Key Sector indicators

- **Enrollment**
- In the year 2020/21 there were **268,908** Students enrolled in HEIs
  - (M145,695, F122,991)
  - **73.5% universities**
  - 40% Science and Technology
- **Academic staff**
  - 13,078
  - 1,965 PhD holder, **15%**
  - **Students: PhD holder ratio = 1:135**
  - **1,997** staff on staff development (570 PhD)



# Key Sector indicators

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- **Space**

- Lecture Space 295,606sqm; per student =1.1m<sup>2</sup>
- Library space 80,389sqm
- Lab space 98,055sqm
- Office –not reported, always ignored
- Number of students accessed by computers =20,823 (<10%)



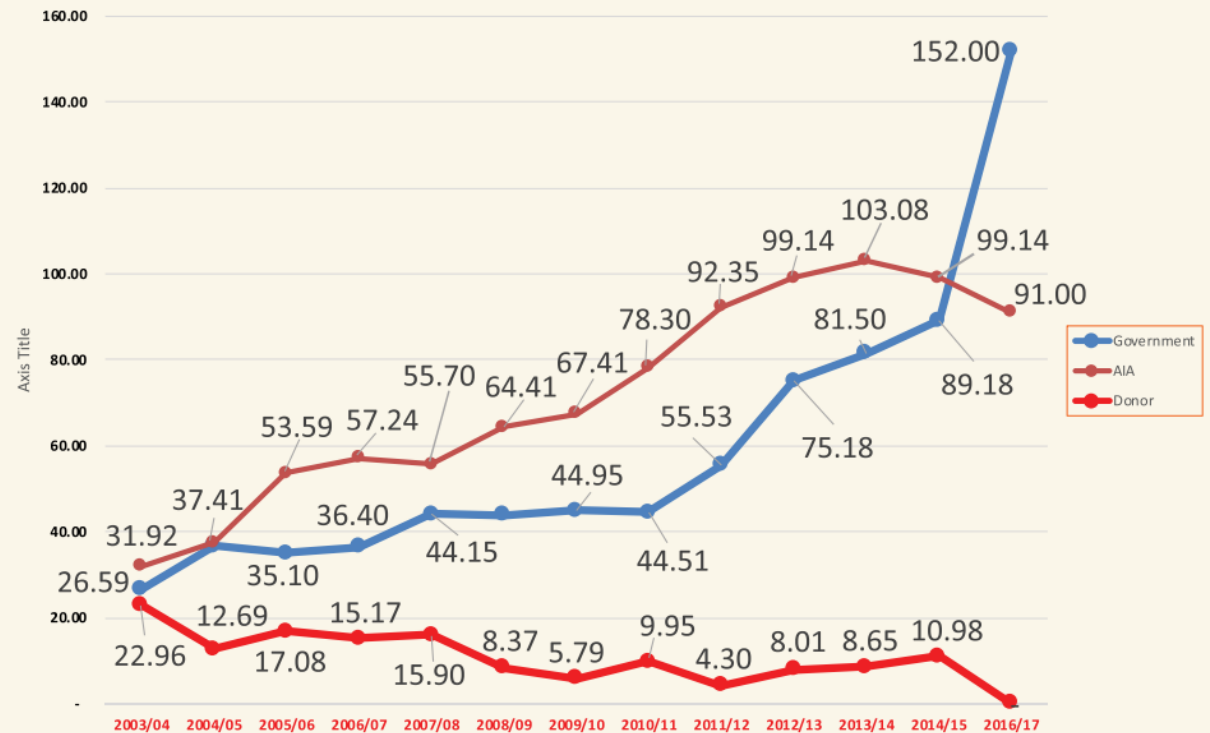
# Financing

Institutional contribution/Appropriation in Aid (AIA) or Non-Tax Revenue (NTR): In Uganda, public institutions are allowed by government to generate more funds to supplement government and donor contributions. These include fees from students, for-profit/commercial activities, endowments and funding from alumni

## Financing

- Donor
- Tuition
- Government
- Grants

### Financing of the University





# Vote 301

**Table V1.1 Overview of Vote Medium Term Allocations (Ush Billion)**

<i>Billion Uganda Shillings</i>	<b>FY2022/23</b>	<b>MTEF Budget Projections</b>				
		<b>Proposed Budget</b>	<b>2023/24</b>	<b>2024/25</b>	<b>2025/26</b>	<b>2026/27</b>
Recurrent	Wage	206.600	206.600	206.600	206.600	206.600
	Non Wage	137.429	137.429	137.429	137.429	137.429
Dev't.	GoU	16.716	16.716	16.716	16.716	16.716
	ExtFin	0.000	0.000	0.000	0.000	0.000
	<b>GoU Total</b>	<b>360.746</b>	<b>360.746</b>	<b>360.746</b>	<b>360.746</b>	<b>360.746</b>
	<b>Total GoU+Ext Fin (MTEF)</b>	<b>360.746</b>	<b>360.746</b>	<b>360.746</b>	<b>360.746</b>	<b>360.746</b>
	<i>A.I.A Total</i>	0	0.000	0.000	0.000	0.000
	<b>Grand Total</b>	<b>360.746</b>	<b>360.746</b>	<b>360.746</b>	<b>360.746</b>	<b>360.746</b>



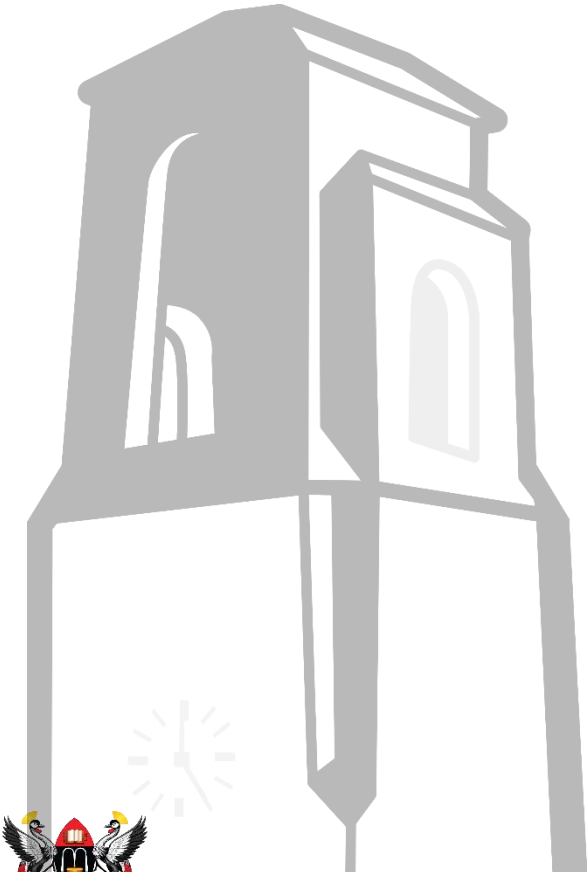
# Challenges of HE in Uganda

1. Narrow funding streams with over reliance on Government and Donors and tuition while many students cant afford due poor background
2. Economic disparities
3. Poor use of ICT
4. Under staffing and low development
5. Low research outputs
6. Frequent student and staff unrest
7. Exam/curriculum malpractices
8. Student retention
9. Work force relevance
10. Outdated tools- limited automation



# Legal and Governance frameworks of Public Universities in Uganda

- **ACTS OF PARLIAMENT.**
  - Constitution of the Republic of Uganda.
  - The Universities and Other Tertiary Institutions Act 2001 (UOTIA).
- **SEVERAL STATUTORY INSTRUMENTS** under UOTIA Act 2001, e.g .
  - S.I No 80C Application for a provisional license to establish and operate a private university.
  - S.I S.I No 63 of 2007 Minimum Entry Requirements for Admission.
- **LAWS GOVERNING** some individual institutions.
  - **MAKERERE UNIVERSITY.**
    - Makerere University Statute for Constituent Colleges (2006)
    - Makerere University Students Guild statute of 2022.
    - Makerere University regulations.
    - Makerere University Policies.



# University governance



- Governance is the process of making and enforcing decisions within an organization or society.
- **University governance requires:**
  - **Freedom** of individual faculty members, **collegial** and **mutual respect** among the faculty, professional, support staff, students, administrative officers and representatives of external entities



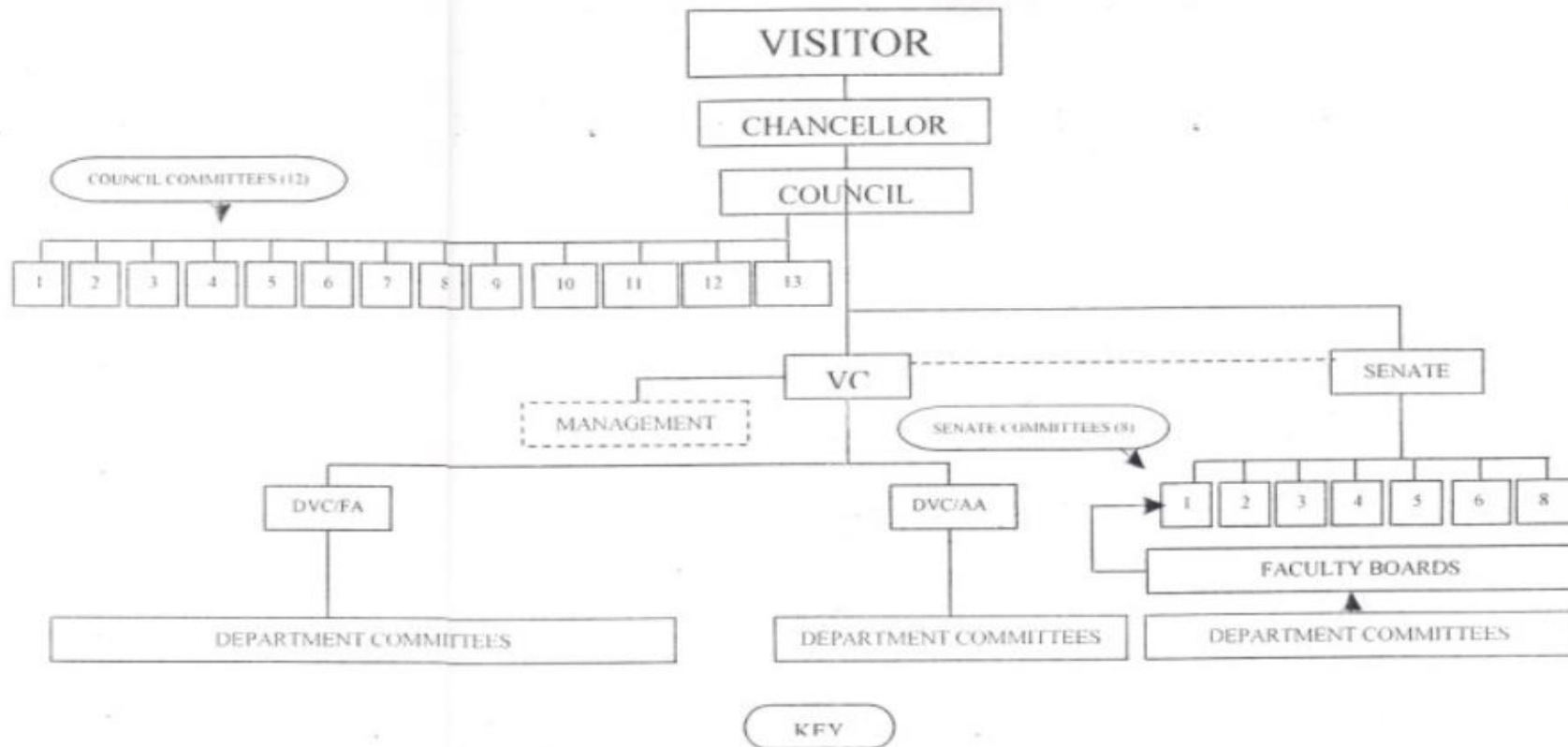
# University Governance structure in Uganda

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- According to the National Council for Higher Education Act (2001:26) ,the following are the university management structures that each university should have in Ugandan university governance.
  - The University Chancellor
  - The University Council
  - The Vice Chancellor
  - The Senate
  - The Faculty/School/College
  - The Academic Department



# MAKERERE UNIVERSITY: GOVERNANCE STRUCTURE



## COUNCIL COMMITTEES

- 1 Finance, Planning & Development Committee
- 2 Student Affairs & Disciplinary Committee
- 3 Establishment & Administration Committee
- 4 Staff Development Committee
- 5 Appointments Board
- 6 Estates & Works Committee
- 7 Security Committee
- 8 Information, Communication & Technology Committee
- 9 Honorary Awards Committee
- 10 Statutes Committee
- 11 Retirement Benefits Committee
- 12 Board of Management of the University Hospital
- 13 Audit Committee
- Ad-hoc Committees

## DEPARTMENT COMMITTEES

- 1 Department Management Committee
- 2 Finance Committee
- 3 Appointments and Promotions Committee
- 4 Specialised Committees
- Ad-hoc Committees

## SENATE COMMITTEES

- 1 Admissions Board
- 2 Examinations Committee
- 3 Academic Programmes and Library Committee
- 4 Quality assurance Committee
- 5 Board of Graduate Studies
- 6 Research and Publications Board
- 7 Gender Mainstreaming Committee
- Ad-hoc Committees



# Challenges to University Governance in Uganda

- Key obstacles to university governance in Uganda are
  - stakeholder interference,
  - bureaucracy,
  - conflicting values,
  - duplicated roles
  - inadequate funding and poor remuneration





# My Business Strategy /vision for the Makerere University

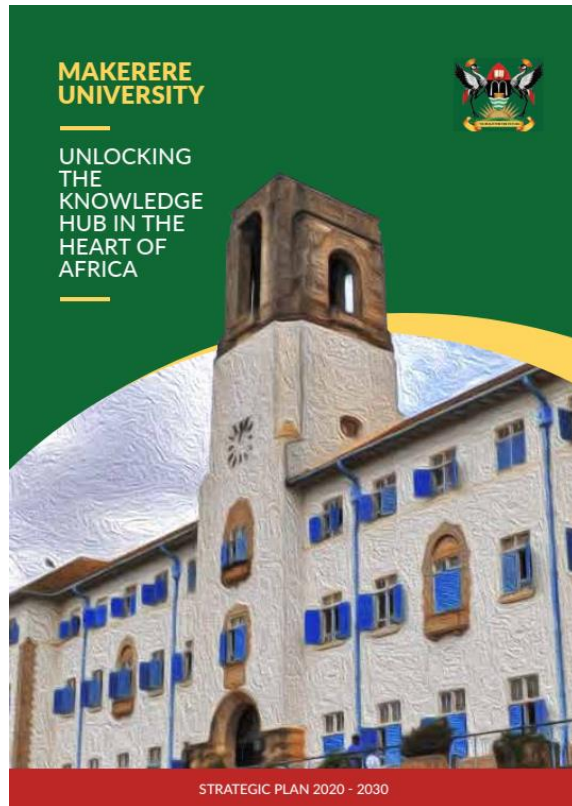
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- The existing business model of higher education is largely dependent on continuous tuition (private and public) and Government appropriation (public).
- Both sources of income are experiencing strain.
  - economic hardship
  - Donor fatigue
  - Less Government appropriation
- The unique circumstances of the twenty-first century call for a redesigned business plan that minimizes financial hardships for students while safeguarding the institution's fundamental educational goal and financial stability.
- Universities need to reconsider their commercial strategies and think of new methods to function, either independently or in collaboration with others to achieve the same objectives at a lesser cost.





# 1. Increase resource mobilization



- Increase inflow, eliminate leakage, maximize value for money (VfM) in order to reduce over reliance on GoU funding in line with the university STP plan 2020-2030

We will ensure that the university operates within sound financial practices; explores and develops new revenue streams and sources of income, including donor funding, investments on the University's lands, lobbying our alumni and contract research and consultancies. We will work towards reducing the University's dependence on the Government funding by at least 30%. We will develop new business models for future financial sustainability.



# My strategy for Increase inflow

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1. Expand existing grant units in Colleges to undertake business strategy
  - Support faculty to raise funds-
  - Each university basic unit required to report on generated funds
  - Units be required to show grants, consultancies, services and products put on the market
2. Operationalize Mak investment policy
3. Development and partnership proposals to multinational funding agencies including commercial entities
4. Nurture endowment
5. Improving alumni relations as a resource base
6. Treating students well, train students in fundraising, happy students, happy alumni
7. Expand government budget allocation through efficient budgeting that involves all stakeholder
8. Implement planned capital investment project in line university infrastructure development plan



# Flagship projects

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- **University International convention center**
  - This is planned project with significant work undertaken. I propose to expand the existing University Guest House into a full international University convention centre with hotel services to align with the core mission of knowledge generation and dissemination. This project should be implemented under a partnership development project with external funds
  - Retreat
- **Renovation and Refurbishment of University Buildings (RRP)**
  - Each unit to develop a costed renovation and refurbishment plan
  - Budget included in university annual budget



# Example of an RR project at MLI-vaccine House 2022

Before



After



# University Health Services

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- Global university Hospitals are the biggest provider of quality health services in their cities
- While it is key to have a teaching hospital, it important to note that establishing a facility to teach is very costly.
- I propose to establish a quality university hospital/academic medical center that generates resources to sustain itself and teach as a service.
- Therefore I propose University Hospitals of Makerere University (UHM) strategic ally located to offer services and teach according to disease burden.

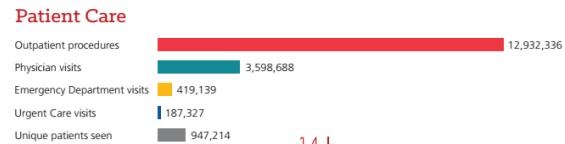
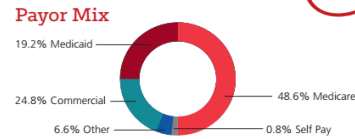




# University Hospitals



## System at a Glance



122,854 Total Surgical Cases

**\$5.4 billion**  
Total operating revenues

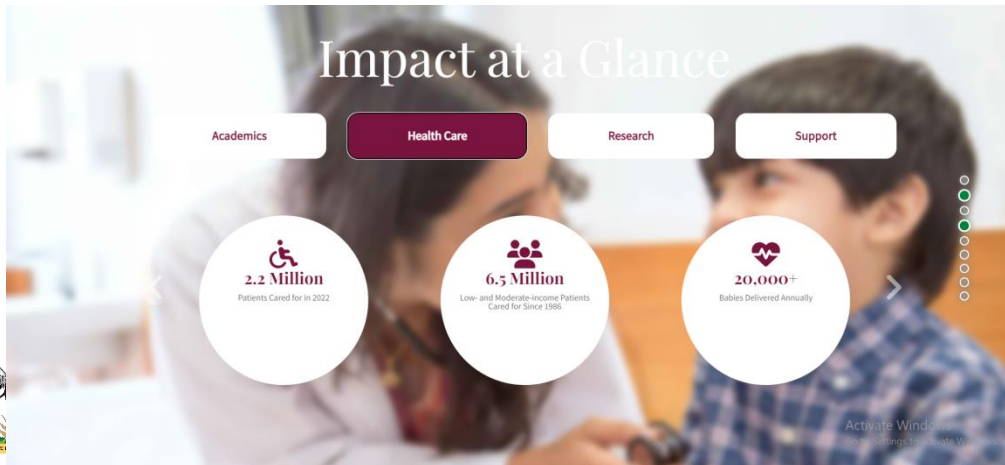
**\$(211)<sup>3</sup> million**  
Net operating loss

**(3.9)%<sup>3</sup>**  
Operating margin

Joint UH-CWRU clinical & translational research (includes NIH grants to CWRU School of Medicine attributable to UH Cleveland Medical Center): **\$89 million**

Sponsored research funding to UH Cleveland Medical Center (including industry-sponsored clinical trials): **\$88.2 million**

Total Research Portfolio: **\$177.2 million**



# Sports industry

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- Mak has one largest estates in the city center
- Large pool of young people, 35000 at each time
- These are huge ingredients of the sports industry
- The global Sports market size was valued at USD 370000.0 Million in 2022 and will reach USD 677673.0 Million in 2028
- Renovate and refurbish sports facilities
- Expand with 1 international level stadium
- Start talent identification at admission and affirmative action





## 2. Operations efficiency improvement

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- In a university key operations include
  - Staff recruitment, retention, development, promotion and well fare
  - Estates and facilities development, maintenance
  - Procurement and disposal of assets
  - Security
  - Student admission, teaching, examination and graduation, although this is a student affairs activity under AA, F&A docket enables them





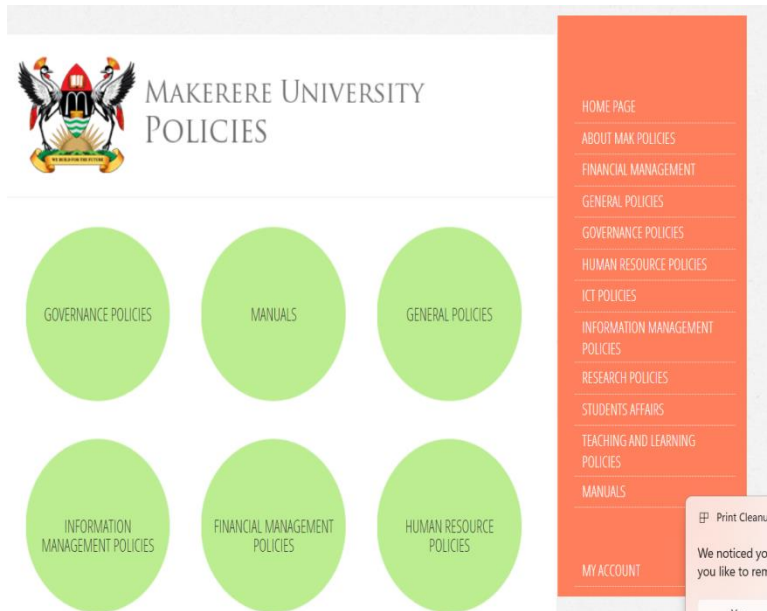
# Operations efficiency vs. management

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- For operations to be **efficient**, there must be an operations **management plan** in the organization
- Operational efficiency refers to maximizing output while minimizing input and reducing waste, inefficiencies, and unnecessary costs.
- Operations management involves designing, implementing, and controlling operational processes and systems to enhance organizational performance and productivity.
- Operations should be broken down to their basic units in order to efficiently implement them



# My Strategy for operations efficiency improvement



- Review and update and disseminate university policies
- Map each operation, i.e. break it down into its basic operation units (BOU)
- All work with basic unit to improve efficiency
- Automate –data captured at each stage into a database that generates summaries for high level managers
- E-binding, evaluation and award
- Increase number of operations/administrative staff after job/workload analyses
- Delegation and decentralization –effective delegation



# Summary

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- Academics can play a huge role in operations efficient improvement.
- Operations can look monstrous but with breaking them down to their basic units, they can be very manageable
- **Nothing for us without us**



### 3. Accelerate the university ability to create 21<sup>st</sup> century university product

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- We need to have a clear catch plan to produce a product required by 21<sup>st</sup> century market
- Globalization of economies has resulted from the ease with which capital, people, products, and services can now be moved throughout the globe thanks to faster and more effective communication and transportation networks.
- To help them navigate the uncertainties of a labor market that is changing quickly, workers in the twenty-first century need to possess not only occupation-specific skills but also information-processing abilities like literacy, numeracy, and problem-solving abilities as well as "generic" abilities like self-management, interpersonal communication, and learning capacity.



# Recognizing what sets the university apart.

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- The National Council for Higher Education reports an increase in institutions and enrollments in Uganda every year. Nevertheless, the majority of higher education institutions provide comparable programs despite the rise in their number.
- National ranking systems place a strong emphasis on standardized test scores, small class sizes, per-student spending, and admissions selectivity. Rather, careful differentiation that builds on the institution's current assets, capabilities, and regional setting is more advantageous.



# What resources are required to produce an excellent learning environment for students?

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- Teaching, research, and service constitute the three main goals of universities
- The 21st Century University must take the lead in creating resources that help students clarify their objectives, choose and create the best learning opportunities to acquire the skills necessary to meet those objectives and share their progress with others outside of the classroom.
- Focusing on performing fewer things well could lead to better results.
- This can be accomplished by concentrating on the knowledge and abilities that lead to prosperity and growth. Due to the significant changes in the nature of work brought about by technological revolution, there will be an increase in the number of occupations requiring advanced skills and a degree. These new challenges will



# Acknowledgements

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- Makerere University
- Search committee for the opportunity to present here
- My referees for believing in me
- Family and friends for the support

