INTELLECTUAL PROPERTY AND RESEARCH AND DEVELOPMENT (R&D) INSTITUTIONS

SAUDIN JACOB MWAKAJE INTELLECTUAL PROPERTY MANAGER, University of Dar es Salaam, TANZANIA

INTRODUCTION

- The world economy is changing- We are in the "information age".
- Conception of what amount to property has significantly changed- we are no longer restricting the meaning of property to tangibles.
- In the knowledge based economy, the dictates of the day are the "ideas and concepts".

Introduction Contd..

- In the knowledge-oriented economy, universities and research institutions play a key and dynamic role in the economy.
- Universities and other research institutions are entangled in many types of researches with enormous potential of creating value and attend the problems in the society.

Research Management and Intellectual Property

- For decades, universities and R&D institutions in the developing economies have not been associating themselves with IP.
 - Neither promotion nor protection;
 - IP- Not in their teaching curriculum;
 - No national and/or institutional IP policies;
 - Researchers -interested with the immediate economic gains – at the expense of the long term value that can be captured from research outputs using the IP system.

The Changing Research Landscape

- From the mid-1980s change of global policies increasing western influence - liberalization of the economy – the key players are in the private sector
- Increasing collaboration with the western research institutions brought-in **new research values** - the need to have clear guidelines on ownership of research out puts;
- Inadequate and Diminishing Financial Support from the governments;
- Can the IP management system fill the gap and strike a balance?

Why IP Management?

- 1. As a way of tapping value from research;
- 2. As a way of creating additional incentive to researchers;
- 3. As a way towards developing beneficial linkages with other research institutions;
- As a way of forming long-term beneficial partnerships with the private sector – SMEs, startups,;
- 5. As a means of attracting research funding from private sector;
- 6. As a means of gauging the impact of research to the society;
- 7. As a way of repositioning R&D Institutions;

- A typical process of integration starts with Institutional IP Audit.
- IP Audit serves the following functions:
- To identify existing IP potentials from research reports/results;
- To identify potential partners in developing the IP assets;
- > To identify the risks;
- To identify market opportunities for future commercialization;
- To identify the current research practices vs. best IP practices;
- To develop institutional IP portfolio

The Next Step is to formulate the <u>Institutional IP</u> <u>Strategy</u> – the findings of the IP audit are extremely important in formulating the IP strategy.

The Institutional IP Strategy serves the following:

- It sets the institutional goals regarding IP;
- It sets the institutional priorities in harnessing IP;
- A self-assessment tool in gauging success or failure in harnessing IP;
- > As a lobbying tool for research funding;
- To identify areas in the institution that requires shortterm and long-term action;
- It identify the means of achieving the stated IP goals;

The IP strategy is followed by the setting of the institutional IP infrastructures:

Institutional IP Infrastructures entails:

- Institutional IP Policy;
- Institutional IP Guidelines;
- Intellectual Property Management Office;
- Integrating IP in curriculum in all disciplines;

The IP Policy envisages, among other things:

- 1. Key policy issues as identified in the IP strategy;
- 2. The Scope of issues and persons covered;
- 3. Ownership of IP;
- 4. Processes Operationalization;
- 5. Transfer/Commercialization of IP assets;
- 6. Benefit sharing scheme;
- 7. Enforcement;
- 8. Dispute Settlement.

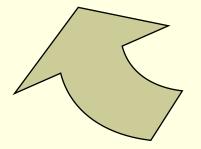
- <u>The Intellectual Property Management Office have the following</u> <u>traditional functions:</u>
- It plays an advisory role on all issues relating to IP;
- It is responsible for implementation of the IP policy;
- Negotiating "Licensing-out" and "licensing-in" of the IP assets;
- Creating linkages between researchers and IPMO– a complex process;
- Taking all necessary timely actions to protect the IP interest of the institution;
- Filing of the Patent Applications in most cases this may be sourcedout;
- Conducting institutional IP Audits;
- Reviewing of the Research Collaborative Arrangement it may create tension with researchers;
- Carrying out IP awareness programs;
- Creating partnerships with potential users of various research results.

IP Best Practices in Research:

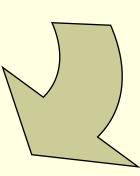
- 1. Laboratory practices the need to control access to information by the visitors;
- 2. The use of Lab Notebooks;
- 3. Signing of the Non-Disclosure Agreement;
- 4. Issues relating to material transfers;
- 5. Publish or Perish *vs.* Patent or Perish;
- 6. Freedom to Operate (FTO);
- 7. Intellectual Property Audit;
- 8. Intellectual Property Compliance;
- 9. Authorship/ Inventorship

The Research Cycle:

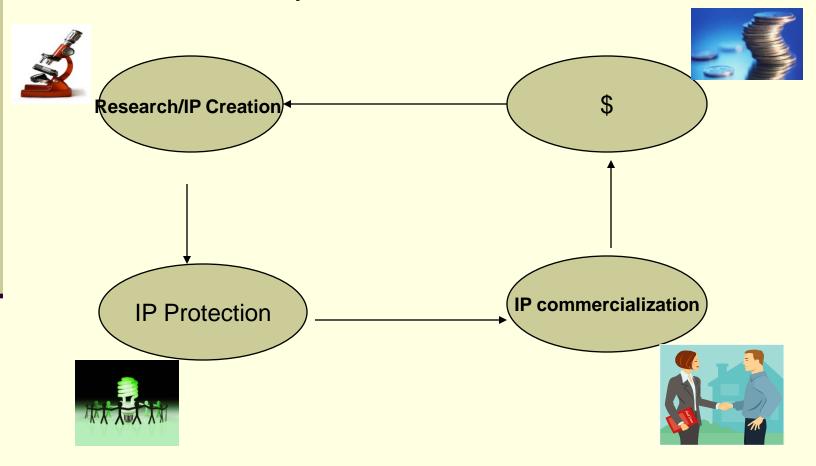
The Public/ The Government Universities/ Research Outputs



Industry/Investors



Commercial exploitation of IP



Some of the Challenges:

- 1.The mindset change;
- 2. Budgetary Constraints;
- 3. Long Pay-back Period;
- 4. Conflict of interests (maintaining public interest vs. commercial interests);
- 5. Non-existence of the national IP policy frameworks;

The way forward:

- 1. The need for R&D to take a proactive role in adopting the IP agenda;
- 2. Linking with WIPO and ARIPO for assistance;
- 3. Liaising with National IP office for expertise and advise;
- 4. Commit budget for IP Audit, Strategy, Policy, and Management Office;
- 5. Develop partnerships i.e USHEPiA

The USHEPiA IP Initiative...

- Currently, USHEPiA have eight (8) partner universities:- UDSM, UCT, UoN, UB, JKUAT, University of Zimbabwe, University of Zambia, and Makerere University;
- The partner universities in 2004 recognized their lack of IP infrastructure in their respective institutions in terms of:
 - Policy Framework
 - Awareness
 - Absence of the IP or Technology Transfer Offices

USHEPiA Initiative Contd....

- There were a unanimous feeling that all partner universities, except the UCT, need a support system in order to establish the IP policies and structures in their respective institutions;
- The Need for Sharing of Expertise and Resources in IP Management in USHEPiA partners.

The USHEPiA Initiative Contd....

- Given the limited available resources, it was decided that instead of spreading the resources to each partner university, the IP Coordination Office be set in one of the Partner University.
- The UDSM was selected, after the bidding process, as the host for USHEPiA IP Coordination Office.
- The office is currently set and is under the Directorate of Research.

The Role of the USHEPiA Intellectual Property Office

- To establish IP information and support infrastructure at the UDSM;
- Play an advisory role on all matter of IP to partner universities, in particular;
- Collaborative Research agreements which have IP bearings.
- Assist in IP awareness programs of partner universities;
- Advise on suitable modes of universityindustry linkage;

Contd.....

- Liaise with partner universities to establish IP Offices and Policy mechanisms;
- Enhancement of IP capacity at each partner university through awareness raising and introduction of IP teaching curriculum:
 - Currently, UDSM, UoN, UCT, Makerere, and UoZ have IP courses at the Faculty of Laws.
 - ** The move is to make IP a cross-cutting course to cover other disciplines.

Role of IP Office- Contd....

- Establish a Link between the Universities and the Industry/Start-up companies and Investors in Technology and other forms of IP.
 - Through introduction of IP best practices and review of market strategies.
 - IP Audit
 - Licensing Agreements
 - Research Collaboration

The Goals-Expected Outputs

- IP policy formulation at each partner university
- Creation of defined IP infrastructures at each partner universities
- Raise of awareness on IP matters to the academic staff members of the partner universities.
- Establishment of the IP Best Practices at each partner university.

Goals - Contd....

- Increased research collaboration between USHEPiA partners and other R&D institutions
- Trickle-down effects of the benefits resulting from IP harnessing to the following parties:
 - Researchers
 - The Universities
 - Funding Agencies
 - The general public
 - The government

Conclusion

- R&D operate in a fast changing and complex business environment
- Property relations are being redefined It is those with ideas that are set to rule the world;
- In order to develop a self-sustaining circle of research and innovation – IP is an indispensable agenda;
- The integration process requires investment in Time and Financial Resources
- The need for institutional collaboration on IP Management Capacity Building

THE END

THANK YOU

ASANTENI SANA Saudin J. Mwakaje saudinj@udsm.ac.tz