## FINANCIAL MANAGEMENT FOR THE HIGHER EDUCATION SECTOR

Theme: Innovation for Sustainability in the Higher Education Sector



### Alternative income generation options in the face of dwindling enrolment

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### Revenue leakages



Opportunities and challenges

Most universities faces declining revenue

- Mostly occasioned by declining numbers of student
- Change in enrolment patterns
- Increase in drop-out cases

Unique opportunities exist in the increased focus on knowledgeintensive growth that magnifies the critical role of higher education in their overall socio-economic development.

- Balancing the need to raise educational quality with the increasing social demand for access.
- Employability of imparted skills

### Key challenges for universities



Rapid changes in the higher education, driven by economic, social, political, and technological forces, have created an unprecedented set of challenges for financing universities

- Decline in government funding/capitation
- Revenue leakages
- Dwindling module II revenues
- Increasing cost of market/industry driven training program.
- Increases demand for quality services
- New technological and pedagogical approaches to be embraced
- Biting inflation /higher operating costs

# Consequences of the challenges



Lack of financial sustainability

- Closure of campuses and constituent colleges
- Compromise on quality of delivery
- Inability to meet obligation as they fall due (liquidity and financial distress)
- Stalled projects and research
- Call for mergers
- ❖ Retrenchment
- Industrial actions

### Key to enhancing financial sustainability



#### **Expanding revenue**

- New method to be conceived as response to the need to devise and implement resource mobilization schemes to augment and fill the budget gap
- Strengthened fiscal capabilities
- Utilization of core competences (zoning)

#### **Cutting back on cost**

- Prudent budget structure
- Fiscal discipline

# Innovation in revenue generation



#### Commercialization of research

- Intellectual property
- Research funding
- Out sourced research

#### **Endowment funds**

- Donor funding and well-wishers
- Alumni activities

#### **Others**

- Real estate (hostels)
- University enterprises
- In house training and workshops
- Climate adaptations

### Research commercialization: opportunities and challenges



Commercializing scientific research or a breakthrough idea involve development of research finding to investable and revenue generating establishment

- more difficult in practice because of the steps required to turn basic research into something practical and
- looking for a market for a product, rather than designing a product to fit an established, or obvious market.
- Applied research focus more on solving real life problems thus are more investable that basic knowledge research (end up in publication journal)

# Must be supported and properly institutionalized



- Offices to promote and link research ideas and finding to the market.
- Identifying for a problem to fit a solution for society is always a tough going.
- ❖ it's probably even tougher to find someone who will back you with money, time, and resources that will be needed to turn research into something that will benefit society/ have value and marketable.
- \* knowledge and recognition may be the only reward for the researcher
- The investor who take the financial and commercial risk might get the full financial benefits.

### Research and business driver

- Researcher consider whether outcomes makes original contribution to our understanding of the world.
- Businesses have a different rationale, which, by and large, is to make money.
- This explain why many business entities have minimal research budget
- Some prefer to mimic competitors product as opposed to original innovations (the beaten path or tested ideas)
- Other would rather pay royalties against someone else innovation (buy ideas directly form the markets (copyrights, franchises and patents)
- Collaboration opportunities for incubation of research finding before commercialization

# Commercialization process lengthy



There are many routes for this:

- Licensing (example a system for IFRS 9 reporting),
- royalties,
- incubation, and
- in-house development (copyrights or patent).

Industry itself has also moved physically closer to large universities (e.g. science parks) to share in the human capital.

Beneath all this activity there are complex issues regarding how much potential value lies locked up in these intellectual assets and how they can best be developed to maximize and generate value.

In house development yield highly valued intellectual properties

A catalogue for the intellectual property must be maintained

# Invention rights and obligation



Important to know who owns and who has the right to develop research output.

As academics, by default, most institutions (or less often, funders) own your research.

The institution may choose to protect your ideas with copyrights, licenses, or patents, (a wise idea if they are to have commercial value)

Disclaimer for any liabilities (that of the inventor)

### Other benefits of research



Challenge for the many benefits evaluation, for example,

- collaboration,
- data sharing,
- knowledge sharing, and
- ❖publish.

## Separate the research process from development



There is big difference between basic research and the development of such research to the point of commercialization.

Development is done by the entity commercializing the product and could be considered the mid-point between academic and commerce.

Development can be hugely expensive and time-consuming and presents a huge financial risk to the investor, especially as it is a front-loaded cost.

The investor has to look at potential for mass production (scaling up from lab levels), distribution, logistics, pricing, practicality, marketing, safety, the law, etc.

## Theoretical and exploratory ideas



Sometimes researchers invariably investigate things out of intellectual curiosity without any view to commercialization.

The original research must be aimed at solving any commercial, market-related problems, outside of obvious areas such as pharmaceuticals and engineering

The breakthrough inevitably made to serve market requirements.

## Challenge for establishing market



if no ready market exists, it has to be developed.

That takes money, advertising, skill, and time. All of which add to the development costs.

### Isolating needs from wants



People often express "wants", but they buy "needs"

It is so easy for an academic scientist to believe there is a need for a product resulting from their research when in fact it is a want (or to put it another way, it's a "nice to have" not a "must have").

Thus, commercialization of a breakthrough needs to address what people or other businesses will actually pay for—and this is a complex issue.

# Make idea comprehensible to everyone



A layman should be able to relate to the finding A common problem is that the relationship of the research to the final practical product may not be clear.

One approach to solve this is by association: "Our breakthrough is a distinct improvement on..."

Focus on the biggest profit opportunities in your early pitches.

#### Listen to customers



Peer review of research publications evaluates novelty, a correct and accurate scientific process, reproducibility, and value to the community.

- ❖ In business, the analogy is the importance of testing out ideas and products before a full launch and then to listen carefully to what the ultimate consumers say.
- This market research is key; if the market is lukewarm, it doesn't matter how great the research, a product won't happen.
- Need to be prepared for the eventuality that while the market research does not indicate a product can arise as you envisioned, a different product might be possible.

### Role of endowment funds in financing higher education



#### **Endowment funds**

- Donor funding and well-wishers
- Alumni activities
- ❖ Endowments represent money or other financial/real assets that are donated to universities or colleges and are meant to be invested to grow the principal and provide additional income for future investing and meat specified expenditures.
- ❖ Typically, endowment funds follow a fairly strict set of long-term guidelines dictating the asset allocation that will yield the targeted return without taking on too much risk.
- Most endowments have guidelines stating how much of each year's investment income can be spent for the specified purpose eg bursaries.

### Type of endowments



Four different types of endowments

- ❖ Term endowments usually stipulate that only after a period of time or a certain event can the principal be expended.
- Unrestricted endowments are assets that can be spent, saved, invested and distributed at the discretion of the institution receiving the gift.
- ❖ A quasi-endowment is a donation by an individual or institution, given with the intent of having that fund serve a specific purpose. The principal is typically retained while the earnings are expended or distributed per specifications of the donor.
- ❖ Restricted endowments have their principal held in perpetuity, while the earnings from the invested assets are expended per the donor's specification.

#### How endowment work



- The principle donations is meant to be perpetual investment income generating asset
- Income is meant to be used for operations or programs that are consistent with the wishes of the donor.
- Most endowments are designed to keep the principal amount intact while using the investment income for charitable efforts as per the guidelines.

### Impact of sound endowment fund management



- Endowment donors can sometimes restrict how the institution spend this money with an investment policy statement (ISP).
- ❖ For example, donors can decide to use a portion of an endowment's scheduled income on a merit-based or need-based scholarship. Another standard restrictive use of an endowment's income is to provide funding for endowed professorships, which are used to attract world-class educators.
- ❖ Other than these restrictions, universities can use the rest of the allotted spending amount as standard income. (Decisions about whether it should be spent on hiring professors, upgrading/repairing facilities or funding more scholarships are left up to school administrators.)
- ❖ An endowment's investment income can also significantly lower tuition costs for students.

# Other strategies of revenue generation



- Real estate (hostels through public private partnership)
- University enterprises where commercial like activities are undertaken
- In house training and workshops staff competency and training on behalf of industry partners

### Greener campuses



Climate adaptation that provide opportunities for; Additional revenue such as

- Carbon credits
- Solar (photo voltaic grid) and wind energy sales

#### Reduces operating cost

- Use of natural lighting
- Water evaporation cooling systems
- Rain water harvesting