DEVELOPLNG INNOVATIVE PROPOSALS

ROSE NYANGA

MASENO UNIVERSITY

RESEARCH

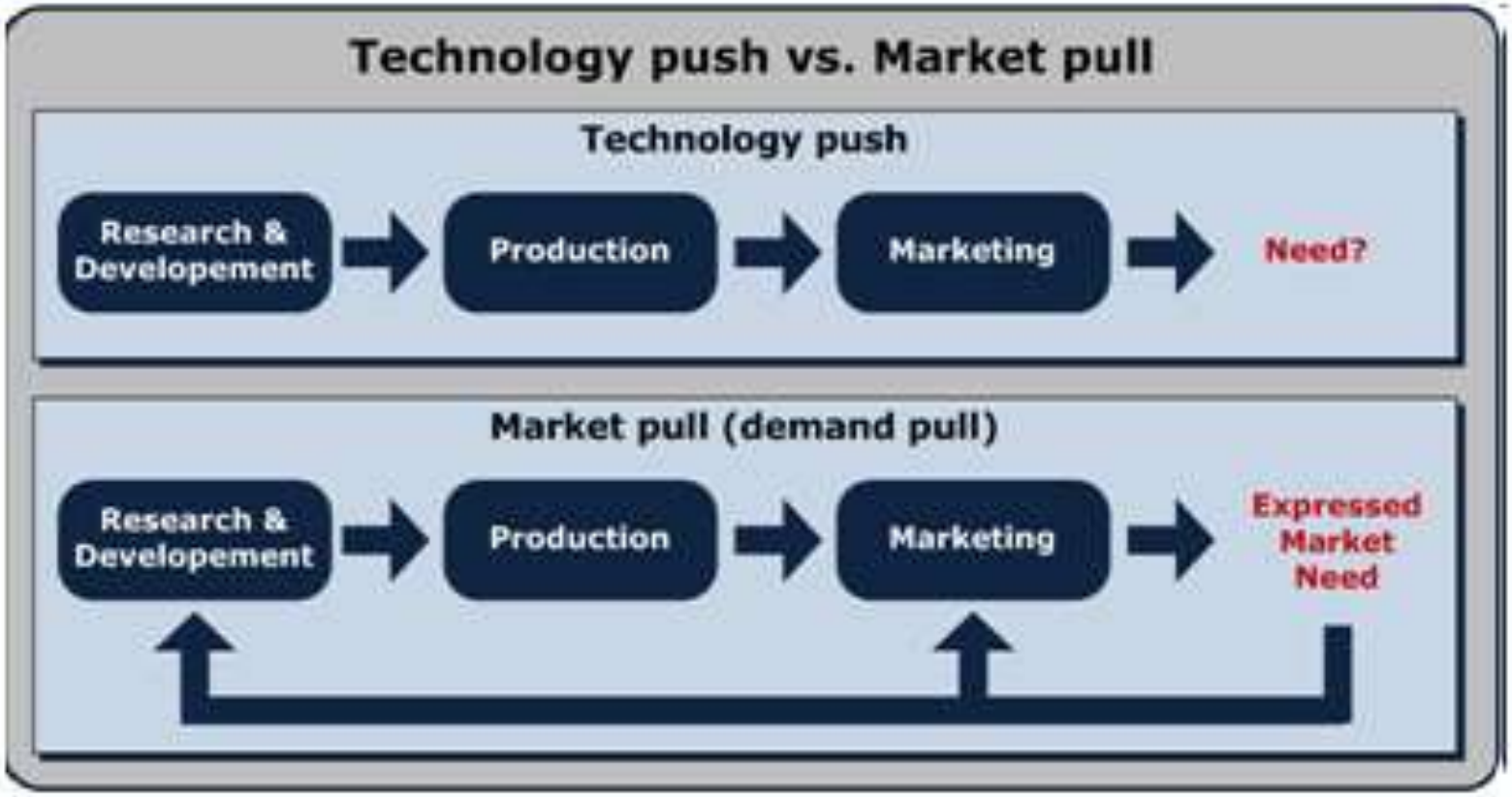
- Research refers to an in-depth inquiry or investigation in order to answer some predetermined questions.
- Leads to generation of **new knowledge;**
- **Used for answering specific questions or to prove or disprove a hypothesis;**

.

Innovative research as summarized by President Kame Nkrumah in 1963

- "We shall **accumulate machinery** and **establish steel works**, iron foundries and factories;
- we shall link the various states of our continent with communications;
- we shall astound the world with our hydroelectric power;
- we shall drain marshes and swamps, clear infested areas, feed the undernourished, and rid our people of parasites and disease **and:**
- It is within the possibility of science and technology to make even the Sahara bloom into a vast field with verdant vegetation for agricultural and industrial developments".

Innovation Development Theories



Expectations from Research

- promotion of economic growth and employment generation in the long- term.
- generate knowledge, create wealth and upgrade social wellbeing of the population.
- increase the demand for outputs and outcomes in both local and foreign markets
- acquire new ways to get more output from the same number of inputs or even less;

Defining Quality Research

- Research quality from the socio-economic point of view is determined by the following;

❖Must envisage some output in terms of new or improved products, services or processes;

❖ Seek to achieve scientific or technological advancement;

❖Involve the resolution of scientific or technological uncertainty.

Institutional Support for Quality Research

- Quality research does not work in a silo; instead, it requires a system that include the following:

❖ A vibrant higher education system which is strongly research and innovation oriented and a beneficial interaction with the enterprise sector;

❖ Government programmes that are aligned to the national goals, market needs and other sectoral policies.

❖ A responsive market for the research outputs and outcomes

Innovations

Points to Note

- If you do something that has been done 100 times before, you can't call it innovative unless you introduce something "new" or "novel";

- But on the flip side, just because you come up with something "new" or "novel", you can't necessarily call it innovative, either;

- Innovation implies not only newness, but a sense of unique utility.

Example of Unique Utility Ideas

Driving water borne diseases in Africa;

- This problem has existed overtime
- Traditional approaches to dealing with this have included development and distribution of antibiotics and vaccines, and implementation of sanitized water systems.

- But both solutions have **been problematic** because the infrastructure doesn't exist for maintaining and distributing drug supplies, nor are there adequate resources to maintain proper large scale water sanitation:

- **Coming up with "new" ways to solve this problem is considered to be innovative.**

Innovative Research can therefore be defined as:

- Generating ideas and applying them to solve a pressing problem.

- An innovative grant proposal should therefore "**propose to solve an existing problem in new ways".**

What to remember while developing a proposal:

- A lot of science is not innovative, but may be a useful source of information;
- Don’t try to pretend that your science is innovative when it isn’t because the expectations are clear;
- Do what you can to bring new ways of solving problems, but don’t force things that are not working to work.

COMPARISIONS

BASIS FOR COMPARISON	DISCOVERY	INVENTION	INNOVATIONS
Meaning	Discovery refers to the act of **finding or exploring** something which already existed but not perceived before.	Invention is creation or designing of an item or a process which has **never been existed before,** with own ideas and developments.	Innovation implies the implementation of idea for product or process for the very first time.
What is it?	Coming upon something, which is not yet acknowledged.	Developing something original and advanced.	Adding value to something already existing.
Represents	Natural occurrences	Scientific or human-made artifacts, devices, processes	Practical implementation of new idea.
Involves	Exploration	Experimentation	Experimentation and a set of marketing, technical and strategic skills.
Subject	Discovered on purposely or accidentally.	Conceived on purposely.	Developed on purpose
Existence	Pre-existent	Non-existent	Existent from invention
Patent	No, it cannot be patented.	Can be patented.	Can be patented

Developing Innovation Proposal:

Where is the Emphasis?

1. Evidence Based

- Innovative research proposal must be evidence based and must involve:
- asking question(s) objectively;
- gathering data;
- Analysing and;
- interpreting the data;

2. Goals and Objectives

Goals and objectives are important because they give shape to the project.

The Research Objectives need to:

- **Pursue multiple parallel objectives** because innovations draw on many sources of ideas;
- **Access a large number of knowledge sources** to improve the odds of successful innovation;
- Analyze the possibility of generating innovations from the research – **the root to market plan;**
- Determine the **possible impact** of any foreseen innovations;
- Increase investment in breakthrough research and innovation.

3. Problem/need

- The degree to which **the project addresses a significant socio-economic needs** and its likelihood of success in addressing the needs specified.
- A **multi-faced** project would be desirable where possible;
- With in the funding priorities of the funder to address e.g the ‘big four’

4. Evaluation and Sustainability

- Has an appropriate plan been laid out to monitor and the project outcomes/milestones?

- Multiple methods of evaluation are encouraged;

- Is there continued funding and/or an ability to self-sustain the program after the grant period has ended?

5. Impact

- Describe how you expect this project to improve the situation as described in the problem statement

- Clearly describe the relationship between the proposed activities and the anticipated outcomes and outputs.

6. The Budget

- Does the proposal include a detailed line-item budget?
- Include only line items;
- Does the line-item budget include reasonable costs (neither inflated nor underestimated);
- Include only the items that would be fundable by the grant funder;
- Match the budget with the goals and objectives;
- Include a narrative to justify the numbers;
- Use calculating software to perform mathematical processes;
- **Remember that budget is a plan and a detailed budget enables you to be a good steward of your research funds.**

7. General observations

The following could still affect an innovative proposal negatively and need to be considered:

- Synchronize all parts of the proposal and ensure there is a flow;

- Ensure clarity and don’t assume that your readers can infer the critical information they need.

General observations Cont'

- Align the proposal with the institutional, national (**The Big 4 Agenda**), regional **(STISA)** and international development **(SDGs);**

- Dividing your proposal into sections corresponding to the bulleted list of criteria in the call for proposals helps in quickly and easily assessing how well the proposal addresses these criteria compared;

- When you have completed your proposal, review it thoroughly by sharing with your friends and colleagues for views:

Specifics assessed in Innovation Proposals

- How does your proposal specifically fit the criteria described in the call for proposals?

- **Product :** Clearly define your product and make others understand what it is about.

- **Scientific/Technical aspects:** Demonstrable prototype and the extent to which the technical specifications of the innovation are grounded on sound scientific principles and sufficiently addresses any anticipated product risks.

- **Originality:** The uniqueness of the innovation and its superiority in comparison with similar or alternative products in the market.

Specifics assessed in Innovation Proposals

- **Social and economic impact***:* The ability of the innovation to create or effect positive or desirable changes within the target community and beyond (improving quality of life and wealth creation).

- **Potential for commercialization and scalability:** The extent to which the solution can be easily applied to other similar markets beyond the applicant's immediate or local environment.

Specifics assessed in Innovation Proposals

- **Efficiency and Effectiveness**: The extent to which the innovation yields reasonable outcome/result for the amount of work/energy/resources that it will require.

- **Marketability*:*** The extent to which the innovation sufficiently addresses the problem it seeks to solve at a price or model that is accessible to the target market.

- **Usage /Acceptability:** The extent to which the innovation can be easily understood and used by others (e.g. the integration of gender and disability perspectives in the project).

Specifics assessed in Innovation Proposals

- **Contribution to Competitiveness:** Can the innovation be leveraged on by the key economic sectors.

- **Contribution to Sustainable Development***:* How well the whole project supports the cause of sustainable development including environmental considerations.

Remember

Your proposal is just one of the many other proposals they will be reading;

THEREFORE:

create some interest on it

Thank You for Listening