

CSC 413 - GROUP 6

Idea Generation

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1. Understanding the Appetite for New Ideas

The major stakeholder in the education sector is the ministry of education. Other stakeholders include schools and students.

As the major stakeholder and major driving force. The ministry of education has taken measures to digitize the education sector which is proof that they are at least looking at new ideas where there is an acceptance that there is a need to change the current way of doing things.

2. How the Problem is Framed Shapes the Ideas Being Sought or Offered

Many schools in kenya have numerous issues when it comes to reading material.From misuse of allocated funds by the government, to loss and misplacement of books, there are many problems that arise from the conventional library.

Justification

- I-library is an online platform that makes library books available to schools in Kenya and is particularly ideal due to the digitization of education i.e. provision of laptops to primary schools and the attainment of Kenya's Vision 2030.
- I-library is an efficient, fun and effective way of learning that profits the authors, publishers and pupils as well as the school administration.
- It is cost effective (saves costs on building libraries, replacing lost books), prevents forgeries, and is reliable.

Justification [continued]

I-learning, being an online platform, will improve record management. These records will be useful by the government for planning purposes and also the Ministry of Education and schools can use it to monitor the progress of the students. When it comes to contemporary learning methods, I-library is the way to go.

3. The Type of Problem Dictates the Types of Ideas Needed

This problem is open to a range of types of ideas and it has high scalability. Matching this problem with an idea generation process that will provide the right type of ideas depends on the following factors:

- Problem definition
- Certainty
- Agreement
- Stability
- Existing solutions
- Experience
- Ownership
- Discretion

3.1 Problem Definition

The failure to address the issue sooner has resulted in, from misuse of allocated funds by the government, to loss and misplacement of books, there are many problems that arise from the conventional library, presence of outdated books still being used in schools that cannot afford new books, high cost of books being a burden on parents and schools resulting in even students having to share textbooks.

3.2 Certainty

There is certainty about the problem because there is clearly a failure to move with the times and adopt to new technologies that are more efficient both economically and even environmentally.

3.3 Agreement

There's agreement that this problem exists and once it is resolved library books will be available online which will make learning efficient, effective and fun.

3.4 Stability

The problem is likely to improve during the process of responding to it.

3.5 Existing Solutions

Multiple solutions have been implemented to try and modernise the education sector such as: introduction of laptops in schools, E-learning from the private sector such as M-shule which is the first adaptive, mobile learning management platform designed to improve performance for millions of primary school students across Kenya and sub-saharan Africa. Elimisha Tutors, SKOOLDESK(Uganda) - is an intuitive e-learning platform that helps kids improve their learning outcomes through tests with automated grading, interactive learning objects and a robust analytics engine that helps identify strengths and weaknesses at subject and topic level.

3.6 Experience

Attempts made:

1. introduction of laptops and tablets
2. Podcast
3. Repositories of digital information
4. Digital textbooks
5. MELIMU

3.7 Ownership

The Ministry of Education on behalf of the government is mainly responsible for the issue but funds private attempts to help improve the situation such as Melimu.

3.8 Discretion

- There is very low level of discretion because the government is an active player in the problem space. Procurement procedures set by government have to followed. Disbursement of funds for the project may also be tedious and involve a lot of scrutiny.
- Schools will also have to vet the quality of material made available to their students and its relevance to the curriculum.

4. Understanding the Idea Generation Context

- The idea generation context affects the receptiveness to new ideas and how the problem is framed and constituted,
- To better understand the context in which idea generation is taking place, the following areas will be studied:
 - Previous attempts
 - Existing investment
 - Fit for purpose
 - Not invented here/Invented elsewhere
 - Broader context

4.1 Previous Attempts

- There have been a few previous attempts by the Ministry of Education to digitize reading material for schools such as the laptop/tablet rollout and digital textbooks.
- These attempts have bore little or no benefit most likely due to political reasons and lack of the right infrastructure and technology.
- There could therefore be some enthusiasm for going through with the idea generation process.

4.2 Existing Investment

- In 2017, the Ministry of Education spent 7.6 Billion shillings in the purchase of new school textbooks for secondary and upper primary levels.
- Statistics show that this figure has been higher in previous years.
- The textbooks are procured via a tendering process hence resistance to the idea generation process may be due to political reasons or vested interest by the private sector in the procurement process of textbooks.

4.3 Fit for Purpose

- The idea generation process will ultimately yield a high return on investment if it is seen to the end. This is because it will provide an equal opportunity for students in any part of the country to access reading material. It will also cut costs in building public libraries and replacing lost or damaged books and seal loopholes in the tendering process.
- The idea generation process is however very time consuming since it will take a long time to develop the technology and frameworks required to implement the idea.

4.4 Not invented here/Invented elsewhere

- The government likely subscribes to and “*invented elsewhere*” attitude i.e. it will only accept ideas that have been tried and tested elsewhere.
- The idea generation process therefore needs to lean towards comparing similar approaches that have worked elsewhere.

4.5 Broader Context

- The government is currently conducting a review of all educational materials ahead of the implementation of the Competency Based Curriculum (CBC).
- This means that new textbooks are likely to be procured, phasing out some of the existing ones. The production and procurement of new textbooks will be an expensive process hence our idea provides a cheaper alternative.

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