Cohort 8 Group Members and Roles

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VIAZI LINK

Problem Background

More Than 3.5 million people are employed within the potato value chain, thus potato farming is critical for a significant portion of the population of Kenya. The Potato Sector contributes over 50 Billion to Kenya's economy.

The root problem lies in the middlemen's control over market access and their ability to dictate terms due to the perishable nature of potatoes. Farmers struggling with delays and market

inefficiencies, often have no choice but to accept these low prices, leading to significant financial losses.

Logistical constraints delay the transport of perishable goods, reducing the time that farmers have to secure fair prices. Additionally, there is a lack of market information and negotiation power for individual farmers. This issue is compounded by inadequate infrastructure and support systems that could aid in bypassing exploitative middlemen and engage directly a larger market

Related Solutions Include;

1. **Potato Farmers' Cooperatives**: Several cooperatives, such as the Kenya Potato Growers and Processors Association (KPGPA), have been established to support potato farmers. These cooperatives aim to pool resources, improve bargaining power, and facilitate better access to markets. However, while cooperatives can offer collective bargaining benefits, they often struggle with logistical constraints and have limited reach, particularly among small-scale farmers who may not have the means or resources to join these groups.

2. **Digital Platforms**: Initiatives like **Twiga Foods**, **Green Spoon** and **Tawi** have developed digital platforms that connect farmers with buyers, including retailers and wholesalers. Twiga Foods, for example, provides a platform that aggregates produce from farmers and delivers it to urban markets. Although these platforms have improved market access for some farmers, they primarily target larger-scale producers or those in specific regions, leaving many smallholder farmers, especially in remote areas, underserved.

3. **Agricultural Extension Services**: Government programs and NGOs often run extension services to offer advice on farming techniques, market prices, and crop management. For instance, the **National Potato Council of Kenya (NPCK)** works to improve production

techniques and provide market information. While these services can enhance farmers' knowledge and productivity, they cannot frequently address the immediate logistical issues or offer practical solutions for small-scale farmers facing exploitation.

4. **Mobile Payment Solutions**: Mobile money platforms like M-Pesa have been integrated into agricultural transactions to improve financial inclusion and transparency. Farmers can receive payments directly to their phones, which can reduce cash-handling risks and increase transparency. However, these solutions do not inherently address the logistical challenges or the power dynamics between farmers and middlemen, which remain significant barriers to fair pricing.

5. **Market Information Systems**: Projects such as **Agri-Sok** have been developed to provide farmers with real-time market prices and demand information via SMS or mobile apps. These systems aim to empower farmers with data to negotiate better prices. Despite this, the effectiveness of such systems is limited by factors like inconsistent internet access, low digital literacy among farmers, and the challenge of translating information into actionable negotiation strategies.

Our project seeks to **bridge these gaps** by developing a comprehensive platform that connects farmers directly with buyers, leveraging technology to provide real-time market information, transparent pricing, and logistical support. This platform aims to empower farmers with the tools and knowledge necessary to negotiate better prices and reduce their reliance on exploitative middlemen.

To address this problem effectively, our project will focus on several research questions:

- How can we design a technology platform that effectively connects farmers with buyers while providing transparent and fair pricing?
- What logistical solutions can be integrated into the platform to minimize delays and ensure timely delivery of perishable goods?
- How can we ensure that the platform is accessible to the majority of small-scale potato farmers and meets their specific needs?

Market Opportunity

Solution Idea

This section should contain the following subsections:

- Our primary target users are smallholder potato farmers in Nyandarua. They were identified through interviews and consultations with agricultural experts and community leaders. This group is chosen due to their direct experience with market exploitation and the potential for significant improvement in their livelihoods through better market access.

- While other stakeholders, such as consumers in Nairobi and retailers, are also part of the ecosystem, our focus on farmers addresses the root issue of income instability caused by middlemen.

Solution Prototype

We propose developing a mobile application that directly connects potato farmers in Nyandarua with consumers and retailers in Nairobi. Key features of the app will include:

- **Market Price Alerts:** Providing real-time updates on potato prices in Nairobi to inform farmers about market trends.
- **Logistics Coordination:** Partnering with local transport services to facilitate the timely delivery of produce to Nairobi.
- **Direct Sales Channels:** Enabling farmers to list their produce for sale, allowing consumers to order directly from them.

The user journey will begin with farmers registering on the app, entering their produce details, and setting prices based on market insights. Consumers in Nairobi can then browse available products, place orders, and arrange for delivery. This direct connection aims to eliminate the middleman, ensuring fair prices for farmers.

Assumptions Made

When designing Viazi Link there some assumptions that are made which include;
1. The Small scale farmers have access to devices that have internet access
2. The Small scale farmers will adopt the technology that will improve their sales
3. Market conditions will allow for direct sales to the consumers with little reliability on middlemen
4. Viazi Link will effectively address logistical issues in rural areas

[Maximum length is 5 pages]

Value proposition

Our solution seeks to empower potato farmers in Nyandarua by providing them with a digital platform that enhances their market access,ensuring fair prices and supporting rural economic development.Ultimately increasing their income and economic stability.

Designed Solution

Technologies Used

Kotlin - Used to develop the Android application including its user interface and the backend features.

Screenshots of Main Modules

Here, showcase the main parts of your projects with screenshots after you complete building your solution and then explain what each module does.

Link to the solution

https://github.com/kamilimumobile/viazilink

Business Model

REVENUE GENERATION

Commision Structure

Currently Farmers often receive low prices for their produce due to high transportation costs and the influence of middlemen.Middlemen typically buy produce at a significantly reduced price to cover their own costs, which leads to farmers earning less. The end consumers end up paying inflated prices due to the added costs from middlemen and transportation.

The solution

We propose a direct model where we take a percentage (30%) of the sale price of the produce, which allows for better financial outcomes for both farmers and consumers.

By taking a 30% commission on the sale price of the produce, you establish a clear revenue stream. For example, on a Ksh. 5000 sale, you would earn Ksh. 1500, while the farmer receives Ksh. 3500. This model not only allows for profit generation but also ensures that farmers are motivated to participate.

Fundraising Strategies (non-profit)

Membership or Subscription Model:

Responsible Computing

Content description ,which enables people with visual impairments

Traction

What milestones have you achieved so far. Here, you need to show:

- Which potential users you have spoken to? Share a picture if possible.
- How many users have tried your solution. By the time finalists pitch their final pitch, they should have at least one user having used their product. Share a picture if available.
- Have you made any money from selling your product?
- Have you had any impact from someone using your product?

Funding/Support Need

How much money will you need to implement the next steps (pilot stage upto 3 years from today) and for what items? Ensure you are realistic and objective in your figures. Use market value as much as possible and be able to answer questions around why you want the much you want. Show a graph for your pilot stage funding needs and then describe how much funds you will need post-pilot.

(1 page)

Your team

Describe the skills that the team has, which will make the project implementation successful. (1-2 paragraph, alongside an image of your team members).