# 21Summer

Jamii app

# **Abstract**

Jamii app is a novel hybrid e-commerce and social media platform designed to address the unique challenges faced by retail businesses and consumers in Kenya. The current e-commerce ecosystem in Kenya is characterized by centralization, limited local service options, and difficulties in digital marketing for small businesses. Jamii app leverages artificial intelligence and community-based segmentation to create a more efficient, localized, and user-friendly marketplace. This paper presents the conceptual framework of Jamii app, outlining its key features, potential benefits, and objectives in revolutionizing Kenya's digital commerce landscape.

# Introduction

## **Problem Statement**

The e-commerce sector in Kenya faces several critical challenges that hinder its growth and accessibility:

- 1. Centralization: Most e-commerce platforms operate from central hubs, often necessitating long-distance shipping even for locally available products.
- 2. Limited Service Integration: Existing platforms primarily focus on goods, with limited options for acquiring local services.
- 3. Digital Marketing Barriers: Small and local businesses struggle to effectively advertise their products and services on platforms designed for regional or global scales.

- 4. User Experience Issues: Current e-commerce interfaces often involve cumbersome product uploading processes for sellers who have many products and tedious scrolling for buyers.
- 5. Disconnect Between Online and Offline Commerce: There's a significant gap between digital platforms and local, community-based economic activities.

## Solution

To address these challenges, we propose Jamii app, an innovative platform that combines e-commerce functionality with social media features, tailored to the Kenyan market. Jamii app aims to create a more inclusive, efficient, and localized digital marketplace by:

- 1. Implementing AI-powered tools for easier product listing and discovery.
- 2. Segmenting users into local communities to promote neighborhood commerce.
- 3. Integrating a social feed for business promotion and community engagement.
- 4. Providing a platform for both goods and services.
- 5. Offering Al-assisted customer support and lead generation.

# **Objectives**

The primary objectives of Jamii app are:

- 1. To decentralize e-commerce in Kenya by creating community-based marketplaces.
- 2. To simplify the process of setting up and managing online stores for local businesses.
- 3. To enhance the discovery of local products and services for consumers.
- 4. To provide an integrated platform for digital marketing that is accessible to businesses of all sizes.
- 5. To improve user engagement and platform stickiness through social media integration.
- 6. To leverage AI technology to streamline operations and enhance user experience.
- 7. To bridge the gap between online and offline commerce in local communities.
- 8. To foster economic growth in various Kenyan communities by facilitating easier access to local markets.

By achieving these objectives, Jamii app aims to transform the e-commerce landscape in Kenya, making it more inclusive, efficient, and aligned with the needs of local businesses and consumers.

# How it works

Here's an explanation of how the Jamii app system works:

## 1. User Registration and Community Assignment

- Users sign up and are automatically assigned to their local community based on their location (county, subcounty, constituency, or ward).
- Users can also join custom communities based on interests or specific needs.

#### 2. Business Profile Creation

- Local businesses can create profiles, setting up their digital storefronts.
- Al-assisted tools help in quick setup, including auto-filling product details using computer vision technology.

## 3. Product and Service Listing

- Businesses can list products and services easily.
- The AI system helps categorize and tag items appropriately.

## 4. Social Feed

- Users see a personalized feed showing local businesses, products, and services.
- The feed includes photos, videos, and promotional content from businesses in their community.

## 5. Service Requests

- Users can create threads requesting specific services.
- Local service providers can respond to these requests.

#### 6. Al-Powered Search and Assistance

- Users can interact with an AI chatbot for product searches, recommendations, and general assistance.
- The AI uses RAG (Retrieval-Augmented Generation) to provide accurate, context-aware responses.

## 7. Cross-Community Exploration:

 Users can view feeds from other communities, expanding their shopping options.

## 8. Traditional E-commerce Functionality

Standard product search with scrolling and filtering options is available.

#### 9. User Interactions

- Users can follow businesses, other users, and engage with content (like, comment, share).
- Direct messaging between users and businesses is supported.

## 10. Store Management

 Businesses have access to tools for inventory management, order processing, and customer communication.

### 11. Service Provider Portfolios

 Service providers (e.g., delivery agents) can showcase their work history, ratings, and total jobs completed.

## 12. AI-Powered Follow-ups (Pro Feature)

- The AI can make calls to users who are offline.
- It can also reach out to potential leads on other social media platforms to prevent customer attrition.

## 13. Advertising Platform

 Businesses can create and manage targeted ad campaigns within their communities.

## 14. Payment Integration

Secure payment gateways are integrated for smooth transactions.

## 15. Data Analytics

 Businesses get insights into their performance, customer behavior, and market trends.

## 16. Community Moderation

• Al-assisted moderation tools help maintain a safe and trustworthy environment.

The system operates on a hybrid model, combining elements of social media engagement with e-commerce functionality. The AI components work in the background to enhance user experience, simplify processes for businesses, and create a more efficient marketplace. By segmenting users into communities, the app ensures that content and products are relevant and localized, while still allowing for broader exploration when desired.

This structure aims to create a dynamic, user-friendly platform that addresses the specific needs of the Kenyan market, bridging the gap between online and offline commerce while fostering local economic growth.