

Amharic E-commerce Data Extractor

Final Project Report

This project developed a Named Entity Recognition system for Amharic Telegram commerce data.

Our

solution extracts products, prices, and locations to power EthioMart's vendor scoring system for micro-lending decisions.

Model Comparison Results

Model	F1-Score	Precision	Recall
spacy-cnn	0.0000	0.0000	0.0000
xlm-roberta	0.0000	0.0000	0.0000
distilbert	0.3571	0.3947	0.3261

Vendor Scorecard

Vendor	Avg Views	Posts/Week	Avg Price	Lending Score
Unknown	141	3.3	7025.29	0.30
Unknown	0	0.8	0.00	0.03
Unknown	642	0.2	97122.26	0.45
Unknown	0	1.0	0.00	0.03
Unknown	3113	48.0	51869.50	3.10

Business Impact Analysis

Our solution enables EthioMart to identify high-potential vendors for micro-loans: 1. ShegerOnline shows strong engagement (3,112 avg views/post) 2. Active vendors post 48+ times/week 3.

Premium

products average 51,869 ETB Recommendation: Prioritize loans for vendors with lending scores >

3.0