

DD4A: Digital Development for Africa

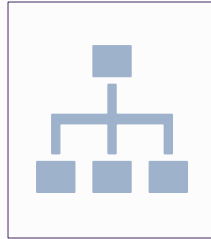
Aditi Gajjar, Andrew Kerr, Liam Quach, Cameron Stivers



01

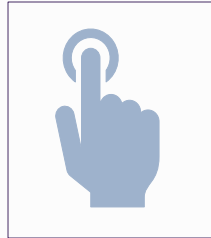
Background

Our Project



Automating Results

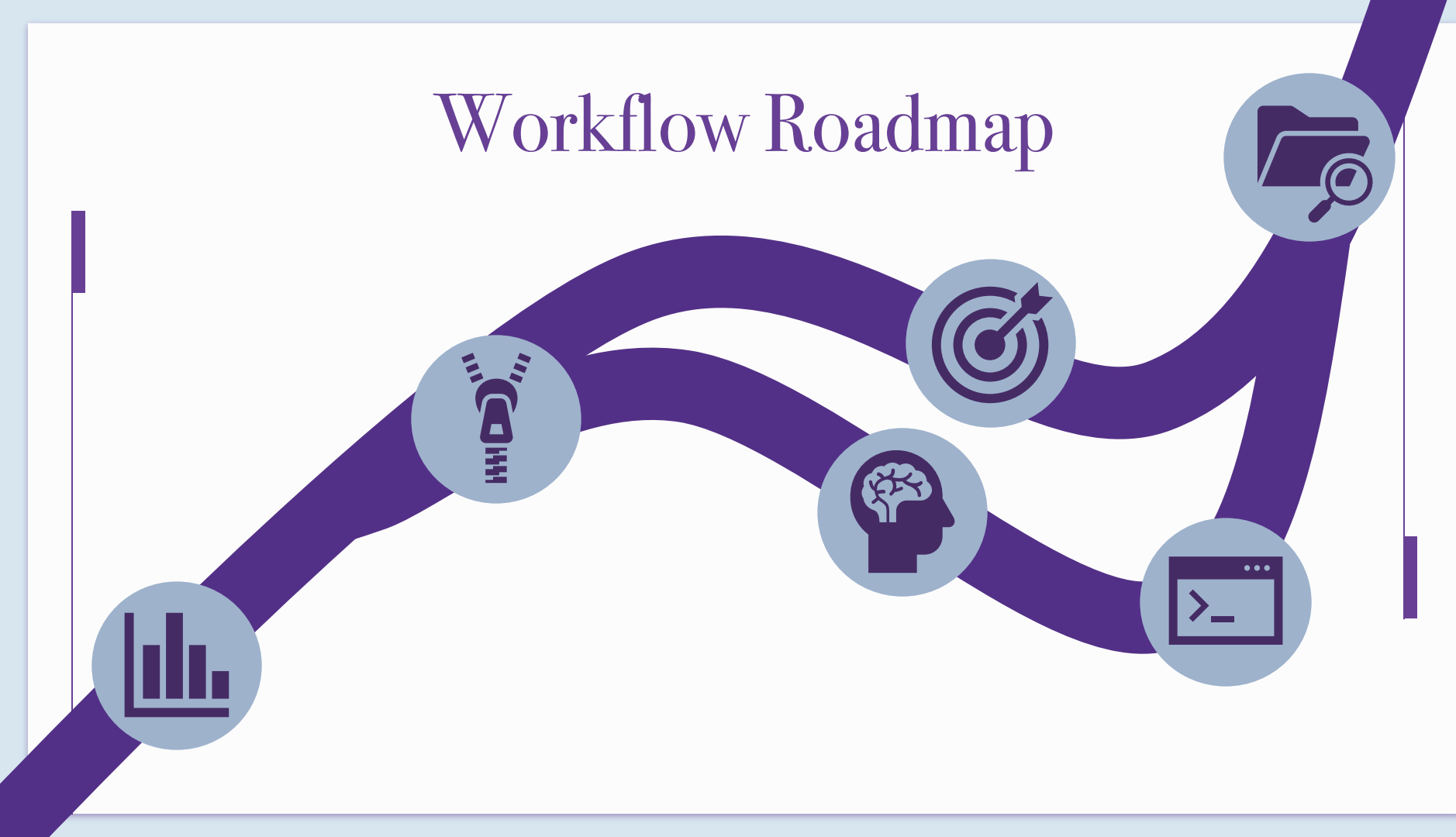
Working towards integrating into an automatized, real-time dashboard



Improving Scorecard Process

Automizing classification of reports for internal organization

Workflow Roadmap





02

The Data



Broadband Connectivity Data

Classify projects as related to broadband connectivity or not using indicator keywords.

A decorative white line runs horizontally across the top of the slide, and a vertical white line runs down the left side. A small white rectangular bar is located at the top right, and a larger white rectangular bar is located at the bottom left.

03

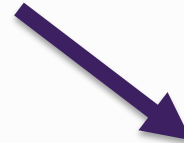
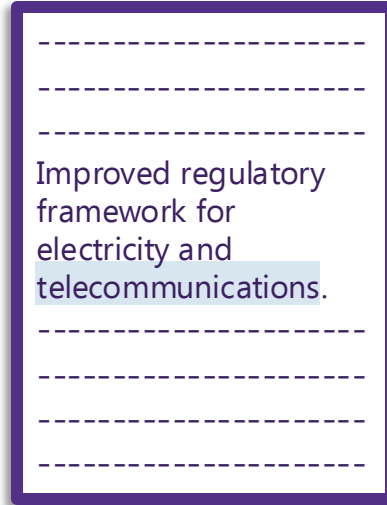
Indicator Classification Approaches

Naïve Approach

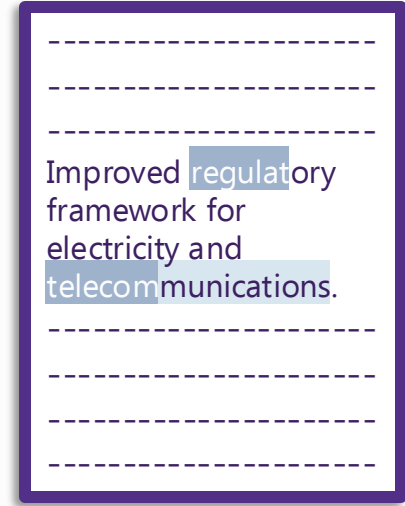
List of Indicators



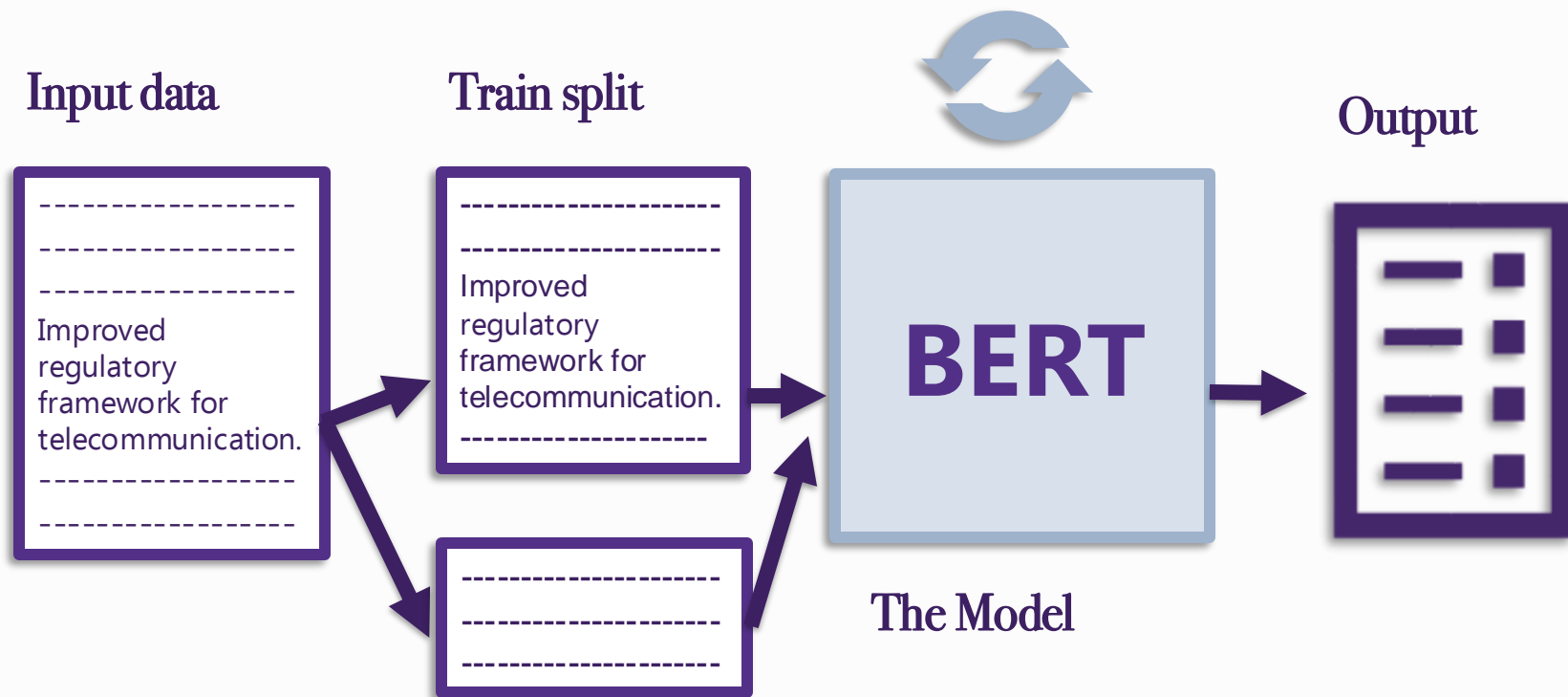
Identify Digital Indicators



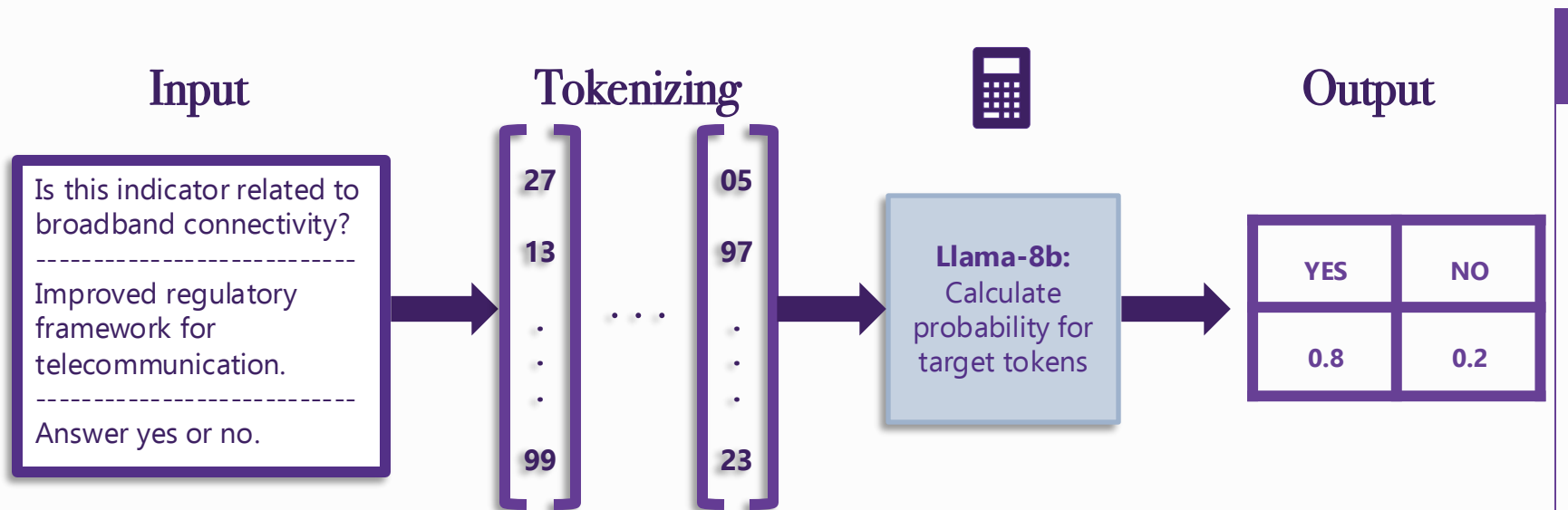
Identify Broadband Connectivity



BERT LLM Approach



Llama LLM Approach



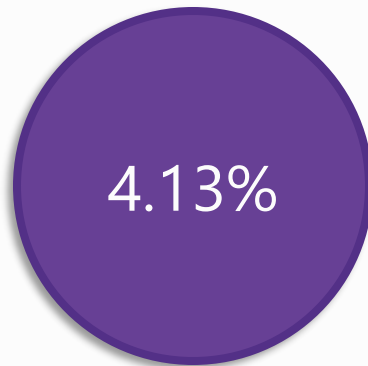
Comparison of the Models

Percent Classified Broadband

Naïve



BERT LLM



Llama LLM



Comparison of the Models

	Total Differing Responses	Broadband by Model X, Not by Y	Not Broadband by Model X, Broadband by Y
Naïve vs. BERT	14,892 (3.53%)	14,252 (95.70%)	640 (4.30%)
Naïve vs. Llama	195 (97.5%)	0 (0.00%)	200 (100.00%)
BERT vs. Llama	188 (94.00%)	0 (0.00%)	200 (100.00%)

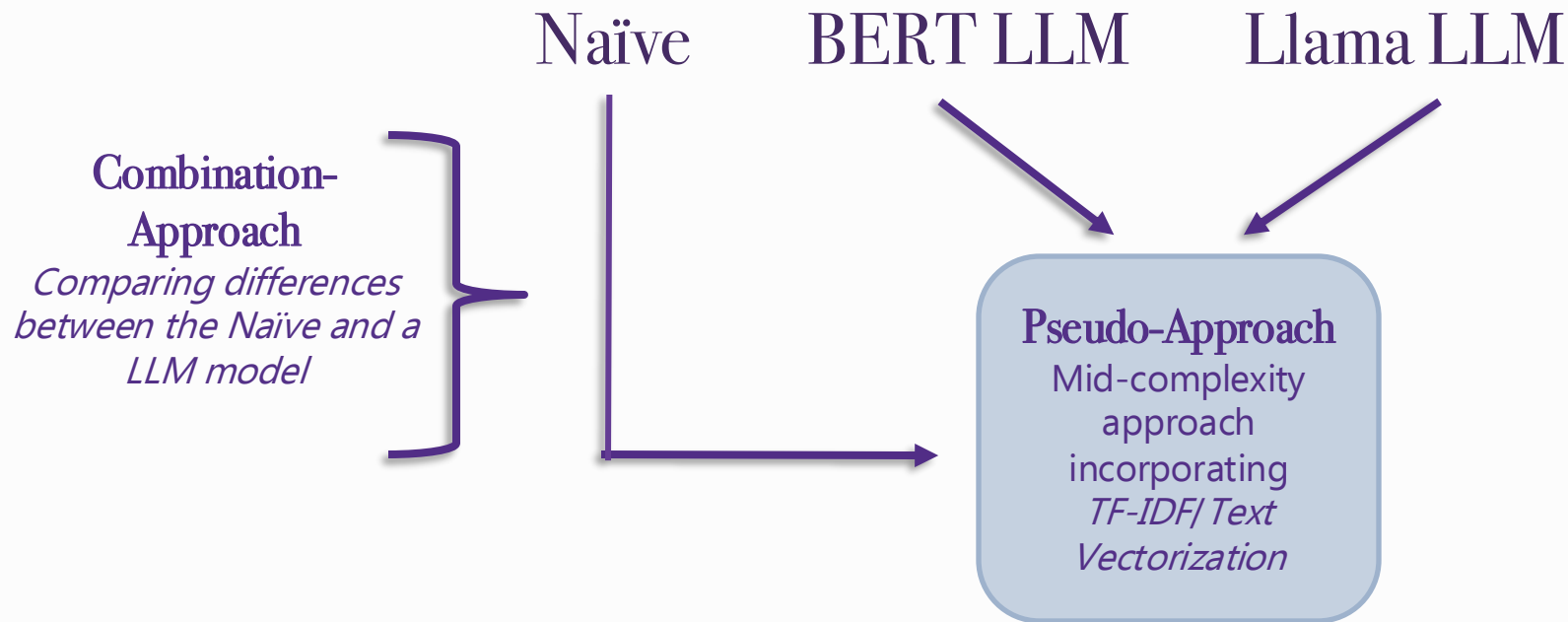
Naïve and BERT run on all ISR data (421,701 obs.)

Llama run on random sample of ISR data (200 obs.)



04 Future Work

Improvements



... The New Model

Questions?

Big thanks to Clement, Julia, Lucine,
Dr. Glanz, Dr. Ventura, and Elise!