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## A Criteria-Driven Guide to Model Selection for Darija Sentiment Analysis

### Communication Info

#### Authors:

Hasnae SAKHI<sup>1</sup>  
Sanaa EL FILALI<sup>2</sup>  
Meryem AMEUR<sup>3</sup>  
Yasmine ABOUDRAR<sup>4</sup>

<sup>1,2</sup> LTIM, FSBM, Hassan II  
University, Casablanca,  
Morocco.

<sup>3</sup> LabSIV, Faculty of sciences,  
IBN ZOHR University, Agadir,  
Morocco.

<sup>4</sup> C3S, Higher School Of  
Technology, Hassan II  
University, Casablanca,  
Morocco.

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- (1) Darija
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- (3) Transfer Learning
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### Abstract

Selecting an appropriate model for Arabic sentiment analysis remains non-trivial when the target is Moroccan Darija, where orthographic variation and limited annotated resources complicate both training and evaluation. This work contrasts two widely used strategies: building sentiment models from scratch and transferring pretrained language models through adaptation or fine-tuning. We organize this comparison through a set of actionable criteria that practitioners typically face, data volume and reliability, preprocessing intensity, compute and time constraints, and deployment requirements. Drawing on recent literature, we outline where each strategy tends to perform well, where it commonly breaks down, and what trade-offs emerge when moving from controlled experiments to production-like conditions. Beyond performance, we discuss practical concerns such as robustness to dialectal noise, ease of maintenance, and interpretability. The main outcome is a compact framework that supports model-choice decisions for Darija sentiment analysis, accompanied by recommendations for more coherent benchmarking protocols in dialectal settings. Darija sentiment analysis, accompanied by recommendations for more coherent benchmarking protocols in dialectal settings.

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