LADy: A System for Latent Aspect Detection

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INTRODUCTION

In Social Network Analysis, business owners can use aspect detection to identify areas of improvement for product features. Existing methods, however, analyze only the explicit aspects in reviews and forego the latent (implicit) aspect occurrences.

LADy focuses on finding the latent aspects in reviews with latent Dirichlet allocation and biterm topic model to generate the distributions of latent aspects among the reviews. LADy's early experimental results on benchmark datasets show promising analysis accuracy, and LADy's object-oriented structure allows the addition of new topic modelling methods, training datasets, and extension methods for customized review analysis.

METHODOLOGY

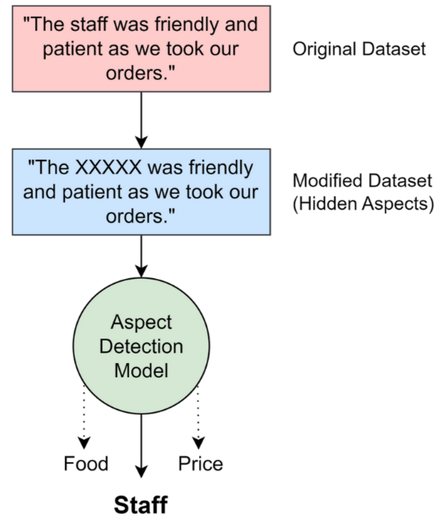
Data Processing

Associate aspect to corresponding token in training dataset.

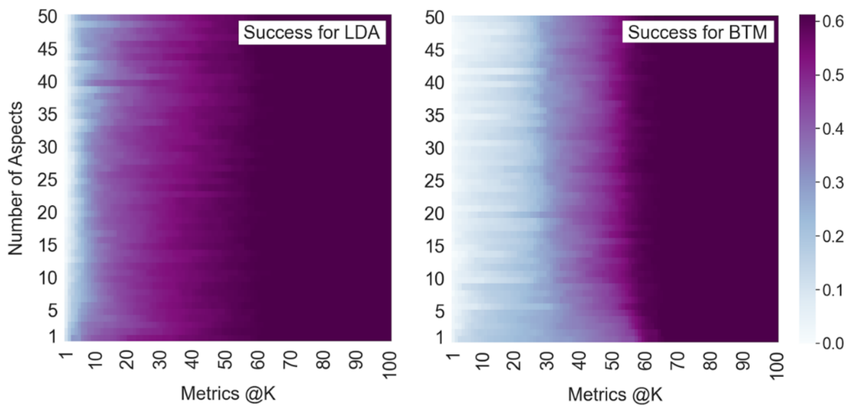
Aspect Modelling

Methods employed: LDA, BTM

Evaluation



RESULTS



CURRENT CHALLENGES

1. Differentiation of Polysemous Word
2. Handling of Aspects not in Training Dataset
3. Finetune model Dictionary for Performance Optimization

REFERENCES

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