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Title: Latent Dirichlet Allocation (LDA), a review of topic modeling and customer

interactions application

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Abstract:

Latent Dirichlet Allocation (LDA) is a powerful probabilistic model used on collections of documents to derived topical structure from the observed words. LDA is a three level hierarchical Bayesian model which observers words in documents and overlays distributions and probabilities over terms, topics, and words to make predictive inferences on topical structures of each document. There are many applications to LDA, but the one presented here is in regards to using topical models on customer reported and machine generated issues (integrated with other models) for optimized solution routing of issues.